Notebook Series -- Notebooks by Edison and Other Experimenters
Disc Plating Experiments
Notebook, N-20-06-08.2

This notebook was used during June-July 1920 and December 1920-March 1921 by Edison, Walter N. Archer, Frank Detlef, Jr., and Howard F. Redford. The entries pertain to the plating processes involved in the manufacture of disc records. The first part of the book contains tabular reports similar to the ones in previous books such as N-20-06-08.1. The reports provide a daily record of molds plated in "Bath 4" using scrapped molds for anodes or cast copper anodes. A few notations by Edison appear on the early entries. The second half of the book contains entries from December 1920-March 1921 for plating experiments, numbered 51-160, that continue the experiments begun in N-20-06-09. The entries focus on improvements in the copper plating process. Among the numerous items inserted into the book are notes and instructions from Edison to Archer, as well as notes from Detlef and Redford to Archer with results noted in the daily record. The front cover is labeled "Baths." The pages are unnumbered. Approximately 180 pages have been used.

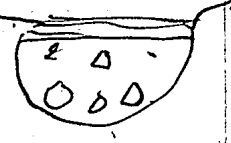
Mar. 15th '21 5¼

new Cu pump - Blades taken off old one - Lasted 4 months.

New Hose on Mar. 18th

4 Bath - 1st Disc in

June 8th	S.G	Volts	Amps	Temp
2.20 P.M. June 8	1175	9½	20¼	84
3.20	1175	9½	19½	83
4.20	1175	9½	19½	80
5.20	1175	9½	19½	82
6.20	1175	9½	19	81
7.20	1175	9½	19	81
8.20	1175	9½	19	82
9.20	1180	9½	19	82
10.20	1170	9½	19	82
11.20	1170	9½	18½	80
12.20	1170	9½	18 190	81
June 9				
1.20 AM	1170	9½	20	83
2.20	1170	9½	21	83
3.20	1170	9½	20¼	83
4.20	1170	9½	20	81
5.20	1170	9½	21	81
6.20	1170	9½	20½	82
7.20	1170	9½	20	81
8.20	1170	9½	20	83
9.20	1170	9½	18½	80
10.20	1170	9½	19	80
11.20	1175	9½	19	80
12.20	1170	9½	19	81
1.20	1170	9½	19 257	81



NG

4 BaTH
June 9

		S.G.	Total	Compos.	Tonage
1 20					
2 20		1170	9.5	18	80
3 20		1170	9.5	18	80
4 20		1170	9.5	18½	82
5 20		1170	9.5	18½	83
6 20		1170	9.5	18½	83
7 20		1170	9.5	18	81
8 20		1170	9.5	18	80
9 20		1170	9.5	18	80
10 20		1170	9.5	18	80
11 20		1170	9.5	18½	80
12 20	June 10 - AM	1170	9.5	19	82
1 20		1170	9.5	19½	82
2 20		1170	9.5	19	80
3 20		1170	9.5	19½	82
4 20		1170	9.5	20	82
5 20		1170	9.5	20	83
6 20	069	1170	9.5	20	83
7 20		1170	9.5	20	83
8 20	Collapse	1170	9.5	21	83
9 20		1170	9.5	21	83
10 20		1170	9.5	20	80
11 20	Out	1170	9.5	20	81

4 Bath

2nd Disc in same Anode June. 10th

In Screen in Bath

11 am. Edge at 18 hours started Crystaline but not enough to stop yet from washing Clear to Edge

Ans. 360 amp hours .028 thick –

4 Bath

Screen in Bath — 2nd Disc same in Anode

		S. G.	Volts	Amps	Temp	
5.00		1175	9 1/2	18	81	
6.00		1175	9 1/2	20	81	
7.00		1175	9 1/2	20	80	
8.00		1175	9 1/2	20	80	
9.00		1175	9 1/2	20	80	
10.00		1170	9 1/2	20	80	
11.00		1170	9 1/2	19 3/4	80	
12.00	Warts appeared at 12:30	1170	9 1/2	20	81+	140
1.00	June 11	1170	9 1/2	20	80	
2.00		1170	9 1/2	20	81	
3.00		1170	9 1/2	20	80	
4.00		1170	9 1/2	20	80	
5.00		1170	9 1/2	20	80	
6.00		1170	9 1/2	20	82	
7.00		1170	9 1/2	20	80	
8.00		1170	9 1/2	20	80	
9.00		1170	9 1/2	20	81	2
10.00		1170	9 1/2	20	81	200
11.00		1170	9 1/2	20	82	
12.00		1170	9 1/2	20	82	
1.00		1170	9 1/2	20	83	
2.00		1170	9 1/2	20	80	
3.00		1170	9 1/2	20	80	
4.00		1170	9 1/2	20	83	
5.00	24	1170	9 1/2	20	83	
6.00		1170	9 1/2	20	82	

Bath No 4
2nd Disc out 2:00 P.M. June 12
start June 10 at 5. P.M.

866 Amp in 45 hours
at 19 amp per hour

4 Bath 2nd Disc same Anode

		S.G.	Volt	Amp	Temp
7.00	19	1170	9½	19	83
8.00		1170	9½	19	83
9.00		1170	9½	19	83
10.00		1170	9½	19	82
11.00	30	1170	9½	20	80 96
12.00		1170	9½	19	80
June 12					
1.00 AM		1170	9½	19¼	80
2.00		1170	9½	19¼	80
3.00		1170	9½	19¼	80
4.00		1170	9½	20	81
5.00		1170	9½	20	80
6.00		1170	9½	19	80
7.00		1170	9½	19	80
8.00		1170	9½	19½	81
9.00		1170	9½	19	83
10.00		1170	9½	19	83 193
11.00	42	1170	9½	19	83
12.00	14 X	1170	9½	20	83
1.00 PM		1170	9½	19	83
2.00 ~~out~~ June 12		1170	9½	19	83

June 12. B4

3 disc. in same Anode

PM	Spec.	Volts	Amp.	Temp.	T. Amp.
3:00	1170	9½	18	83	
4:00	1170	9½	18	82	18
5:00	1170	9½	17	80	35
6:00	1170	9½	18	82	53
7:00	1170	9½	18½	83	71
8:00	1170	9½	18	83	89
9:00	1170	9½	17	83	106
10:00	1170	9½	17	83	123
11:00	1170	9½	16½	81	140
12:00	1170	9.5	17	85	156
1:00	1170	9-5	17	84	173
2:00	1170	9.5	16	84	189
3:00	1170	9-5	16	82	205
4:00	1170	9.5	16	82	221
5:00	1170	9.5	16	82	237
6:00	1170	9.5	16	82	253
7:00	1170	9.5	16	81	269
8:00	1170	9.5	16	84	285
9:00	1170	9.5	15½	82	300
10:00	1170	9.5	15½	82	316
11:00	1170	9.5	15	82	331
12:00	1175	9.5	15	81	346
1:00	1175	9-5	15	81	361
2:00	1175	9-5	15	81	376
3:00	1175	9.5	15	82	391
4:00	1175	9-5	15	83	406

Bath No. 4. June 13 P.M

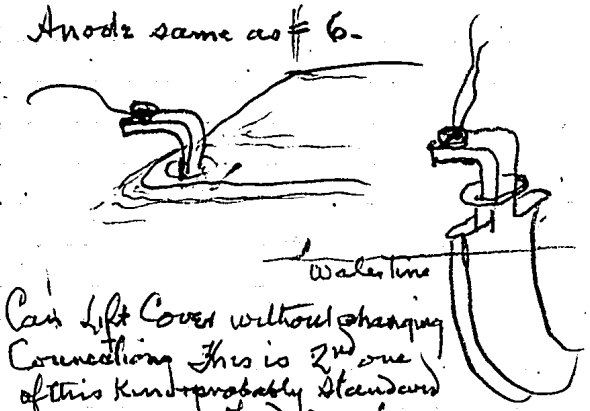
3 rod disc plating in this Bath chopped from 14 amperes to 8 amperes at 10.00 P.M. looked at anode and found worn out. Stopped Plating at 10.10 o'clock

June 13 B4 3 disc in same anode

P.M.	Sec	Volts	amp	Temp	Amps	
6.00	1175	9.5	15	83	421	
6.00	1175	9.5	15	83	436	
7.00	1175	9.5	15	83	451	
8.00	1175	9.5	15	83	466	
9.00	1175	9.5	15	83	482	
10.10	1175	9.5	14	80		taken out

No 4 Bath 1st Disc ind

Anode same as # 6.



Can Lift Cover without changing Connections This is 2nd one of this kind probably Standard

June-15-9-PM Feed Anode

Time	S.Gr.	Volts	Amp	Temp	Total Amp
9.00	1170	9½	20	83	
10.00	1170	9½	22	83	22
11.00	1170	9-5	23	83	45
12.00 PM	1170	9-5	23	80	68
June 16					
1.00 PM	1170	9.5	23	82	91
2.00	1170	9.5	23	80	114
3.00	1170	9.5	23	80	137
4.00	1170	9.5	23½	80	160
5.00	1170	9.5	23½	80	184
6.00	1170	9.5	23½	80	207
7.00	1170	9.5	23½	80	231
8.00	1170	9.5	23	80	254
9.00	1170	9.5	23½	83	277
10.00	1170	9.5	23	83	300

No 4 Bath 1st Disc Out

Time	Ohm	Volts	Amp	Temp	Total
00	1170	9½	22½	80	323
00 AM	1170	9½	22½	80	345
00	1170	9½	22½	82	368
00	1170	9½	23	82	390
00	1170	9½	23½	82	413
00	1170	9½	23½	82	447
00	1170	9-5	23½	82	469
00	1170	9-5	23½	82	492
00	1170	9-5	22	82	514
00	1170	9-5	22	82	536
00	1170	9-5	22	83	558
00	1170	9-5	22	83	580
1.00	1170	9.5	22	80	602
2.00	1170	9.5	22	81	624
June 14					
1.00 AM	1170	9.5	22	80	646
2.00	1170	9.5	22	80	668
3.00	1170	9.5	22	80	690
4.00	1170	9.5	23	80	713
5.00	1170	9.5	22	82	735
6.00	1170	9.5	22	82	757
7.00	1170	9.5	23	81	780
8.00	1170	9.5	22	80	802
9.00	1170	9.5	22½	83	824
10.00	1175	9.5	22	83	846
11.00	1175	9.5	21½	83	868 Out

In June-15-2.00 PM
1st Disc
868 Amp in 38 hours
About 23 Per hour
Out June 17-11.00 AM

Bath No 4 — 2 ohs in Bath

June 17 Hour	Spec.	Volts	amps	Temp.	
1.30	1175	9-5	20	81	
2.30	1175	9-5	21	82	21
3.30	1175	9-5	21	82	42
4.30	1175	9-5	21	82	63
5.30	1175	9-5	21	82	84
6.30	1175	9-5	21	82	105
7.30	1175	9-5	20½	82	125
8.30	1175	9-5	21	82	146
9.30	1175	9-5	21	82	167
10.30	1175	9-5	20½	82	188
11.30	1175	9-5	20½	82	208
12.30	1175	9-5	20½	80	229
June 18					
1.30 AM	1175	9.5	20	80	249
2.30	1175	9-5	20	80	269
3.30	1175	9.5	20	82	289
4.30	1175	9.5	21	80	310
5.30	1175	9-5	21	80	331
6.30	1175	9-5	20	80	351
7.30	1175	9-5	21	82	372
8.30	1175	9-5	21	83	393
9.30	1175	9-5	21	83	414
10.30	1175	9-5	21	83	435
11.30 PM	1175	9-5	20½	83	455
12.30	1175	9-5	21	83	476
1.30	1175	9-5	21	83	497
24					

Bath No 4 2 Disc

	Sp Gr	Volts	Amps	Amp	Total	
7.30	1175	9½	21	83	618	
8.30	1175	9-5	21	84	639	
9.30	1175	9-5	21	84	660	
10.30	1175	9-5	20	83	680	
11.30	1175	9-5	20	83	700	
12.30	1175	9-5	20	83	720	
1.30	1175	9-5	20	83	740	
2.30	1175	9-5	20	83	760	
3.30	1175	9-5	20	83	780	
4.30	1175	9-5	20	80	800	
5.30	1175	9-5	20	80	820	
June 19 AM						
6.30	1175	9-5	20	80	840	
7.30	1175	9-5	20	80	860	Out 37 Hours
~~8.30~~	~~1175~~	~~9-5~~				
~~9.30~~	~~1175~~	~~9-5~~				

No 4 Bath 2nd Disc Out June 19

860 Amp in 37 hours

23.9 Amp Per hour

In June 17 - 1.30 P.M

June 19. 1[illegible]

No 4 Bath after second Mould taken out filled chamber with Copper pieces

June 19 No 4 Bath & the Disc in same circuit

PM	Elev	Volts	Amp	Temp	Total	
3.30	1175	9½	19	83		
4.30	1175	9½	21	83	21	
5.30	1175	9½	21	83	42	
6.30	1175	9½	21½	83	63	
7.30	1175	9½	20½	83	84	
8.30	1175	9½	20½	83	104	
9.30	1175	9½	21	83	125	
10.30	1175	9½	21½	83	146	
11.30	1175	9½	22	83	168	
AM						
12.30	1175	9½	22	83	190	
1.30	1175	9½	22	80	212	
2.30	1175	9½	21	80	233	
3.30	1175	9½	21	80	254	
4.30	1175	9½	21	80	275	
5.30	1175	9½	21	81	296	
6.30	1175	9½	21	82	317	
7.30	1175	9½	21	82	338	466
8.30	1175	9½	21½	82	359	
9.30	1175	9½	21½	83	381	
10.30	1175	9½	22	83	403	
11.30	1175	9½	22	83	425	
PM						
12.30	1175	9½	22	83	447	
1.30	1175	9½	22	83	469	over
					22	

[21]

No 4 Batt. 3rd Discm

Time 12:0 P.M	S.Gr.	Volts	Amp	Temp	Total
2:30	1175	9½	22½	83	491
3:30	1175	9-5	22	83	513
4:30	1175	9-5	21½	83	534
5:30	1175	9-5	21½	83	556
6:30	1175	9-5	21	83	577
7:30	1175	9-5	21	83	598
8:30	1175	9-5	21	82	609
9:30	1175	9-5	21	82	630
10:30	1175	9-5	21	82	651
11:30	1175	9-5	21	82	672
12:30	1175	9-5	21	82	693
1:30	1175	9-5	21	82	714
2:30	1180	9.5	21	83	735
3:30	1180	9.5	21	84	756 Amp

36 hours

No 4 Batt.
Mould taken out
Total Amperes figured up wrong
Night man mistake

Power off at 5 Oclock started again at 5-15 P.M

No 4 Bath 4th Disc
same Anode

JUNE 3 PM	Shr	Volts	Amp	Temp	Total
5.30	1175	9½	19	83	
6.30	1175	9½	21	83	21
7.30	1175	9½	21	83	42
8.30	1175	9½	21	83	63
9.30	1175	9½	21	83	84
10.30	1175	9½	21	83	105
11.30	1175	9½	20½	83	125½
12.30 AM	1175	9½	21	83	146
1.30	1175	9½	21	83	167
2.30	1175	9½	21	83	188
3.30	1175	9½	21	83	209
4.30	1175	9½	21	83	230
5.30	1175	9½	21½	83	251
6.30	1175	9½	21½	84	272
7.30	1175	9½	20	82	293
8.30	1175	9½	20½	83	313 5
9.30	1175	9½	21	83	334
10.30	1175	9½	21	83	355
11.30	1175	9½	21	83	376
12.30 PM	1175	9.5	21	83	397
1.30	1175	9.5	21	83	418
2.30	1175	9.5	21	83	439
3.30	1175	9.5	21½	83	460
4.30	1175	9.5	21½	83	482
5.30	1175	9.5	21	83	503

No 4 Bath 4 disc in [illegible]

June 22 PM	Ohm	Volts	Amp	Amp	Total	
6.30	1175	9½	21	83	524	
7.30	1175	9½	21	83	545	
8.30	1175	9½	21	83	566	
9.30	1175	9½	21	83	587	
10.30	1175	9½	21	83	608	
11.30	1175	9½	21	83	629	
12.30	1175	9½	21	83	650	
June 23						
1.30	1175	9½	21	80	671	
2.30	1175	9½	21	80	692	
3.30	1175	9½	21	80	713	
4.30	1175	9½	21	80	734	
5.30	1175	9½	21	80	755	
6.30	1175	9½	21	81	776	
7.30	1175	9½	21	81	797	
8.30	1175	9½	21	83	818	
9.30	1175	9½	21	83	839	
10.30	1175	9½	21	83	860	Amp
		Out			41 hours	
				21 Amp Per hour		

June 23 - 7-30 P.M

Anode Chamber filled up with Copper pieces

No 4 Bath 5th Size in same anode

JUNE 23 PM	Elev.	Volts	Amp	Temp	Total
8.00	1175	9½	19	83	
9.00	1170	9½	19	83	19
10.00	1170	9½	19½	84	38
11.00	1170	9½	19	84	57
12.00	1170	9½	19	84	76
A.M. June 24					
1.00	1170	9½	19	84	95
2.00	1170	9½	19	80	114
3.00	1170	9½	20	80	134
4.00	1170	9½	21	80	155
5.00	1170	9½	21	80	176
6.00	1170	9½	21½	80	197
7.00	1170	9½	22	80	219
8.00	1170	9½	22	82	241
9.00	1170	9½	21½	83	263
10.00	1170	9½	21½	83	284
11.00	1170	9-5	20½	83	305
12.00 PM	1170	9-5	20½	83	325
1.00	1170	9-5	20½	83	346
2.00	1170	9-5	22½	83	368
3.00	1170	9-5	20	83	388
4.00	1170	9-5	19½	83	408
5.00	1170	9-5	19	83	427
6.00	1170	9-5	19½	80	446
7.00	1170	9-5	19½	80	466

No 4 Bath 5th Disc

JUNE 24 PM	Sp Gr	Volts	Amp	Amp	Total
8.00	1170	9½	20	83	486
9.00	1170	9½	20	83	506
10.00	1170	9½	20	83	526
11.00	1170	9½	20	83	546
12.00	1170	9½	20	83	566
AM June 25					
1.00	1170	9½	20	83	586
2.00	1170	9½	20	81	606
3.00	1170	9½	19	82	625
4.00	1170	9½	19½	82	644
5.00	1170	9½	20	82	664
6.00	1170	9½	19	82	683
7.00	1170	9½	20	82	703
8.00	1175	9½	19	82	722
9.00	1175	9½	19	82	741
10.00	1175	9-5	20	82	761
11.00	1175	9-5	19	82	780
12.00	1170	9-5	20	80	800
1.00	1170	9-5	20	80	820
2.00	1170	9-5	19	80	839
3.00	1170	9-5	19	80	858 out

858 Amp

June 25 — 3.00 PM

48 hours

19 Amp per hour

C31

No 4 Bath 6th Disc in same much

June 25 PM	Sgr	Volts	Amp	Temp	Total
7.00	1170	9½	18	80	
8.00	1170	9½	18	80	18
9.00	1170	9½	19	80	37
10.00	1170	9½	19	82	56
11.00	1170	9½	19	82	75
12.00	1170	9½	20	80	95
June 26 AM					
1.00	1170	9½	18	82	113
2.00	1170	9½	18	83	131
3.00	1170	9½	19	83	150
4.00	1170	9½	19	83	169
5.00	1170	9½	19	81	188
6.00	1170	9½	19	81	207
7.00	1170	9½	18½	83	225
8.00	1170	9½	19	83	244
9.00	1170	9½	19	83	263
10.00	1170	9½	19	83	282
11.00	1170	9½	19	83	301
12.00	1170	9½	19	83	320
PM					
1.00	1170	9-5	18	80	338
2.00	1170	9-5	18	80	356
3.00	1170	9-5	18	83	374
4.00	1170	9-5	18	83	392
5.00	1170	9-5	18	80	401

No 4 Bath 6th Disc Out
June-27-700 PM

870 Amp in 48 hours
about 18 Amp per hour

Disc June 25-700 PM

JUNE 27 PM	Lbs	Volts	Amp	Amp	Total
7.00	1170	9-5	17	83	870

Out

No 4 Bath 6th Disc in

JUNE 26 PM	Lbs	Volts	Amp	Amp	Total
6:00	1170	9-5	18	80	428
7:00	1170	9-5	18	83	446
8:00	1170	9-5	17½	83	463
9:00	1170	9-5	17½	83	481
10:00	1170	9-5	17½	83	498.5
11:00	1170	9-5	17½	83	516
12:00	1170	9-5	17½	81	533
1:00 AM	1170	9-5	17½	81	551
2:00	1170	9-5	17	80	568
3:00	1170	9-5	17	81	585
4:00	1170	9-5	17	81	602
5:00	1170	9-5	18	81	620
6:00	1170	9-5	18	81	638
7:00	1170	9-5	18	81	656
8:00	1170	9-5	18	81	674
9:00	1170	9-5	18½	83	692
10:00	1170	9-5	18½	83	711
11:00	1170	9-5	18½	83	729
12:00	1170	9-5	18	83	747
1:00	1170	9-5	18	83	765
2:00	1170	9-5	18	83	783
3:00	1170	9-5	18	83	801
4:00	1170	9-5	18	83	819
5:00	1170	9-5	17	83	836
6:00	1170	9-5	17	83	853

No 4 Bath 7½ disc in same vessel

June 28, 20.

	Solu	Volts	Amp	Temp	Total
12.00 AM	1170	9-5	17	80	
1.00	1170	9-5	16	80	16
2.00	1170	9-5	16½	80	32
3.00	1170	9-5	16½	81	49
4.00	1170	9-5	16½	81	65
5.00	1170	9-5	16½	81	82
6.00	1170	9-5	16½	81	98
7.00	1170	9-5	16½	82	115
8.00	1170	9-5	15½	82	130
9.00	1170	9-5	18½	81	148
10.00	1170	9-5	18½	81	166
11.00	1170	9.5	18	83	184
12.00	1170	9-5	18	83	202
1 P.M.	1175	9-5	19	80	221
2 "	1175	9-5	18	83	239
3 "	1175	9-5	17	81	256
4 "	1150	9-5	17.5	82	273
5 "	1165	9-5	18	78	291
6 "	1165	9-5	18	80	309
7 "	1165	9-5	18-5	80	327
8 "	1165	9-5	18-5	80	345
9 "	1165	9-5	18	80	363
10 "	1165	9-5	18	80	381
11 "	1165	9-5	16	80	397
12 "	1165	9-5	17	80	414

345) 585 (16.9
345
2400
2070
3300
3105
31

Start June 28, 20, 12 P.M.
Finish " 29, 20 10.30 AM
Total Amps 585
" hours 34½
Average Amps = 16.9

4 Bath

#7 disc
disc scrap anode

No 4 Bath 7th Disc in
same anode

June 29

AM	S.gr	Volts	Amp	Temp	Total
1.00	1165	9-5	16½	81	430
2.00	1165	9-5	16½	81	447
3.00	1165	9-5	16½	82	463
4.00	1165	9-5	16½	82	480
5.00	1165	9-5	16½	81	496
6.00	1165	9-5	16½	81	513
7.00	1165	9-5	16	82	529
8.00	1165	9-5	16	82	545
9	1165	9-5	16	87	563
10	1165	9-5	16.5	86	579 Raised ½ V. at 10.15 AM
10.30	"	"	16	86	585 Out

Out out to make space for next exp and cleaned up crystals in anode chamber

June, #4 Bath

Cast made

Screw None

No 4 Bath ~~bot~~ Disc in Cast Mold

JULY 3 PM	Sln	Volts	Amps	Temp	Total	
11:00	1165	9-5	15			
12:00 AM	1165	9-5	15	80	15	
	JULY 4					
1.00	1165	9-5	15	80	30	
2.00	1165	9-5	15	80	45	
3.00	1165	9-5	14.5	83	59	
4.00	1165	9-5	14	83	73	
5.00	1165	9-5	14	83	87	
6.00	1165	9-5	14	83	101	
7.00	1165	9-5	14	83	115	
8.00	1165	9-5	14	84	129	
9	1165	9-5	14	84	143	
10	1165	9-5	14	84	157	
11	1165	9-5	14	82	171	
12.00 PM	1165	9-5	14	82	185	
1.00	1165	9-5	14	82	199	Not a nub on
2.00	1165	9-5	14	84	213	
3	1165	9-5	14	83	227	
4	1165	9-5	14	83	241	
5	1165	9-5	13-5	83	255	
6	1165	9-5	13	82	268	
7	1165	9-5	13	82	281	
8	1165	9-5	13	81	294	
9	1165	9-5	13	81	307	
10	1165	9-5	14	81	321	

No 4 Bath & Lisc
Cast Crucible

JULY 4	Hr	Volts	Amp	Amp	Total	
P.M.						
11.00	1165	9-5	13-5	81	334	not a not on
12.00	1165	9-5	13-5	81	348	
A.M.	July 5					
1.00	1165	9-5	13-5	81	361	
2.00	1165	9-5	13-5	81	375	
3.00	1165	9-5	13-5	81	388	
4.00	1165	9-5	13-5	81	402	
5.00	1165	9-5	14	81	416	
6.00	1165	9-5	13½	81	429	
7.00	1165	9-5	13-5	81	443	
8.00	1165	9-5	13-5	81	456	
9.00	1165	9-5	13-5	81	470	not a not on
10.00	1165	9-5	14	81	484	
11.00	1165	9-5	14	81	498	
12.00	1165	9-5	14	81	512	
P.M.						
1.00	1165	9-5	14	81	526	
2.00	1165	9-5	14	81	540	
3.00	1165	9-5	14	81	554	
4.00	1165	9-5	14	81	568	
5.00	1165	9-5	14	81	582	
6.00	1165	9-5	14	81	596	
7.00	1165	9-5	14	81	610	not a not on
8.00	1165	9-5	14	81	624	
9.00	1165	9-5	14	81	638	
10.00	1165	9-5	14	81	652	

Cleaned up .032
Outside Calipers = .053
Inside " " = .061

54) 748 (13.7
54
200
162
380
378

#4 Bath #1 disc, Cast anode
After cleaning tank free from grease & oil
Run total to 750 Ampe.
Start July 3, 20. 11. P.M.
Finish " 6. 20. 5. A.M.
Total Ampe 748
" Hours 54
Average Ampe 13.7

No 4 Bath 1st Disc
Cast anode

July 5	Sfgr	Volts	amp	Temp	Total	
P.M.						
11.00	1165	9-5	14½	81	666	
12.00	1165	9-5	13	81	679	
A.M.	July 6					
1.00	1165	9-5	13½	81	693	
2.00	1165	9-5	13½	81	706	
3.00	1165	9-5	13½	81	720	
4.00	1165	9-5	14	81	734	
5.00	1165	9-5	14	81	748	Cut
				54 hrs.		

Specimen No 4 edge was rounded off

Vibr. Probe 1½ RPM.
Skimmer taken out
July 7, 9:20 AM

Added 5 cc general bath dope to plating solution 11:30 AM July 7.

July 6 Bath No 4 2nd dec in Coat Anodes

PM	Glass	Volts	amps	Temp	Total
2:30	1165	9-5	14	75	
3:30	1165	9-5	14	80	14
4:30	1165	9-5	18	83	29
5:30	1165	9-5	14-5	83	43
6:30	1165	9-5	14	83	57
7:30	1165	9-5	14	84	71
8:30	1165	9-5	14	84	85
9:30	1165	9-5	13-5	84	98
10:30	1165	9-5	13-5	84	112
11:30	1165	9-5	13-5	84	126
12:30	1165	9-5	15	84	141
AM	July 7				
1:30	1165	9-5	15	84	156
2:30	1165	9-5	14	84	170
3:30	1165	9-5	13-5	84	183
4:30	1165	9-5	13-5	84	197
5:30	1165	9-5	13-5	84	210
6:30	1165	9-5	13-5	84	224
7:30	1165	9-5	13-5	84	237
8:30	1165	9-5	13	85	250
9:30	1165	9-5	14	85	264
10:30	1165	9-5	13	85	277
11:30	1165	9-5	13	83	290
12:30	1165	9-5	13	82	303
1:30	1165	9-5	13.5	83	316

44) 593 (13.4
44
153
132
210
176

4 Bath

2nd disc. in Rat anode.

July 7, 20

Date	Sp. Gr	Volts	Amps.	Temp.	Total
2.30 PM	1165	9.5	13.5	83	329
3.30	1165	9.5	13.5	84	343
4.30	1165	9.5	13.5	85	356
5.30	1165	9.5	13.5	85	370
6.30	1165	9.5	13.5	85	383
7.30	1165	9.5	13.5	84	397
8.30	1165	9.5	13.5	83	410
9.30	1165	9.5	13	83	423
10.30	1165	9.5	13	82	436
11.30	1165	9.5	13	82	449
12.30	1165	9.5	13	82	462
AM	July 8				
1.30	1165	9.5	13	82	475
2.30	1165	9.5	13.5	82	489
3.30	1165	9.5	13.5	82	502
4.30	1165	9.5	13	82	515
5.30	1165	9.5	13	82	528
6.30	1165	9.5	13	82	541
7.30	1165	9.5	13	82	554
8.30	1165	9.5	13	82	567
8.30	1165	9.5	13	80	580
9.30	1165	9.5	13	80	593 Cut

#2 Nickel plated disc, from #1 Ni bath.

Mach. wash, then rinsed with city water, then distilled water and put in mach. disc., Washed dist H2O. 2 min. in copper bath not strong then to 600 Amps

Then Swimmer in bath.

Disc was left stand in copper bath current off 2 hours, showed oxidation on part exposed to air

Rinsed again with distill. water

47 | 643 (13.7
47
123
161
320
329

Start July 8, 20 - 10. A.M.
Finish " 10, 20 - 9.10 A.M.
Total Time 643
Amperes 47
Average Amp. 13.7

#4 Bath

Started July 8, 20.

3rd disc cut and # = Ni Plated from # 1 Ni bath

Date	Sp. Gr.	Volts	Amp	Tem.	Total
10. AM	1165	9.5	14.5	80	
11 -	1165	9.5	13.	80	13
12 -	1165	9.5	13.5	82	27
1. PM.	1165	9.5	13.	80	40
2. PM	1165	9.5	13.	80	53
3 -	1165	9.5	13.	80	66
4 -	1165	9.5	13.	80	79
5 -	1165	9.5	14.	80	93
6 -	1165	9.5	14.	80	107
7 -	1165	9.5	13.5	80	120
8 -	1165	9.5	13.5	80	134
9 -	1165	9.5	13.5	80	147
10 -	1165	9.5	13	80	160
11 -	1165	9-5	13	80	173
12 -	1165	9-5	13	80	[illegible]
July 9, 20					
1 AM	1165	9-5	13	80	[illegible]
2	1165	9-5	13	80	[illegible]
3	1165	9-5	13	80	[illegible]
4	1165	9-5	13	80	[illegible]
5	1165	9-5	13	80	[illegible]
6	1165	9.5	13	80	[illegible]
7	1165	9-5	13	80	[illegible]
8	1165	9-5	12	80	281
9	1165	9.5	13.5	78	303

Anode hanger M. hug, pair [illegible]

Added 10 cc gen. bath dope to
Copper plate Sol. at 11 AM July 9.

643

#4 Bath

3rd dice.
Last
#2 initiated
from #1 My bath

July 9, 21.

Date	Sp Gr	Volts	Amp.	Temp.	Total
10 AM	1165	9.5	14	79	317
11 –	1170	9.5	14	80	331
12 –	1165	9.5	15	80	346
1 PM	1165	9.5	15	82	361
2 –	1165	9.5	15	81	376
3 –	1165	9.5	15	81	391
4 –	1165	9.5	14	80	405
5 –	1165	9.5	14	80	419
6 –	1165	9.5	14	80	433
7	1165	9.5	14	80	447
8	1165	9.5	14	80	461
9	1165	9.5	14	80	475
10	1165	9.5	14	80	489
11	1165	9.5	14	80	503
12	1165	9.5	14	80	517

July 10, 20

1:00	1165	9.5	14	80	531
2:00	1165	9.5	14	[illegible]	[illegible]
3:00	1165	9.5	14	[illegible]	[illegible]
4:00	1165	9.5	14	[illegible]	[illegible]
5:00	1165	9.5	14	80	587
6:00	1165	9.5	14	85	601
7:00	1165	9.5	14	80	[illegible]
8:00	1165	9.5	14	80	629
9:00	1165	9.5	14	80	643

Out

[illegible] 5:[illegible] PM

No 1 Nickel [illegible] washed well and [illegible] with distilled water put in [illegible] put in No 4 Copper bath for 20 minutes with current off start off for [illegible] Amp

[illegible] with screw [illegible] up

No 4 Bath

JULY 10 PM	Slow	Volts	Amp	Amp	Time
8-30	1165	9-5	14	80	
9-30	1165	9-5	13-5	80	13
10-30	1165	9-5	13	80	26
11-30	1165	9-5	12	80	[illegible]
12-30	1165	9-5	12	[illegible]	[illegible]
AM	July	11			
[illegible]	1165	9-5	12	[illegible]	[illegible]
[illegible]	1165	9-5	12	[illegible]	[illegible]
[illegible]	1165	9-5	[illegible]	[illegible]	[illegible]
[illegible]	1165	9-5	[illegible]	[illegible]	[illegible]
[illegible]	1165	9-5	[illegible]	[illegible]	[illegible]
[illegible]	1165	9-5	[illegible]	[illegible]	[illegible]
[illegible]	1165	9-5	[illegible]	[illegible]	[illegible]
[illegible]	1165	9-5	[illegible]	[illegible]	[illegible]
[illegible]	1165	9-5	[illegible]	[illegible]	[illegible]
[illegible]	1165	9-5	12	[illegible]	[illegible]
9-30	1165	9-5	12-5	80	158
10-00	1165	9-5	12	80	170
11-00	1165	9-5	11	80	181
12-30 PM	1165	9-5	11	80	192
1.00	1165	9-5	11	80	203
2.00	1165	9-5	11	80	214
3	1165	9-5	11	80	225
4	1165	9-5	11	80	236
5	1165	9-5	11	80	247
6	1165	9-5	11	81	258
7	1165	9-5	11	81	269

43) 618 (14.3
43 × 9
188
172
160
129
31

Start July 10, 20 at 8.30 P.M.
Finish July 12, 20 - 3. P.M.
Total Amps 618
" hours 43
Average Amps. 14.3

No 4 - Beth Nl fan

JULY 11 PM	Ohm	Volts	Amp	Watts	Watt Hr
8.00	1165	9.5	11	81	
9	1165	9.5	12	81	
10	1165	9.5	12	81	
11	1165	9.5	13	81	
12	1165	9.5	13	81	
AM	[illegible]	12			
1.00	[illegible]	9.5	11	81	
2.00	1165	9.5	11	81	
3.00	1165	9.5	12	81	
4.00	1165	9.5	11	[illegible]	
5.00	[illegible]	9.5	11	[illegible]	
6.00	1165	9.5	11	[illegible]	
7.00	1165	9.5	11	[illegible]	
8.00	1165	9.5	[illegible]	[illegible]	419
9—	1165	9.5	15.5	83	434 changed [illegible]
10—	1165	9.5	15.5	82	450 [illegible]
11	1165	9.5	15.5	82	465
12	1165	9.5	15	80	480
1 PM	1165	9.5	15	80	495
2—	1165	9.5	16.5	80	601
3—	1165	9.5	16.5	80	618 Quit
~~4—~~	~~1165~~	~~9.5~~			

Put new Copper anode in
Rev. 2 min. dry then current 2.7 Amps 2 min
put in dry Copper bath
One minute at 2.3 Amps 6th notch
then full current on.

4 Bath

Start July 12, 20. at 6 30 PM.

Time	Amps	Volt	Amps	Temp	Total
6 30	1165	9.5	13	80	
7 30	1165	9.5	13	80	13
8-30	1165	9-5	13	80	26
9 30	1165	9.5	13.5	81	39
10 30	1165	9.5	13.	83	52
11 30	1165	9.5	13	83	65
12 30	1165	9.5	13	[illegible]	[illegible]
July 13, 20.					
1 AM	1165	9.5	12.5	[illegible]	[illegible]
2.30	1165	9.5	12.5	[illegible]	[illegible]
3.30	1165	9.5	13	[illegible]	[illegible]
4.30	1165	9.5	13	[illegible]	[illegible]
5.30	1165	9.5	13	[illegible]	[illegible]
6.30	1165	9.5	13	[illegible]	[illegible]
7.30	1165	9.5	13	[illegible]	[illegible]
8.30	1165	9.5	12.5	82	162
9.30	1165	9.5	12	82	174
10.30	1165	9.5	12	82	186
11.00	1165	9.5	12.5	83	218
12.—	1165	9.5	12	83	230
1 P.M.	1165	9.5	12.5	83	243
2.00	1165	9.5	12.5	85	255
3—	1165	9.5	12.0	85	267
4—	1165	9.5	12.	85	279
5	1165	9.5	12.5	85	291

#4 Bath

July 13 20.

Time	Sp. Gr.	Volts	Amp	Temp	Total	
6	1165	9.5	13	80	304	
7	1165	9.5	13	80	317	
8	1165	9.5	13	80	330	
9	1165	9.5	13	85	343	
10	1165	9.5	12	84	355	
11	1165	9.5	12	83	367	
12	1165	9.5	13	[illegible]	[illegible]	

July 14, 20

1 AM	1165	9.5	12	[illegible]	411	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	1165	[illegible]	[illegible]	[illegible]	[illegible]	
4.00	1165	9.5	[illegible]	[illegible]	[illegible]	
5.00	1165	[illegible]	[illegible]	[illegible]	[illegible]	
6.00	1165	9.5	12	[illegible]	[illegible]	
7.00	1165	9.5	[illegible]	[illegible]	[illegible]	
8.00	1165	9.5	11.5	[illegible]	[illegible]	
9-	1175	9.5	11.5	80	496	
10-	1165	9.5	12	80	478	
11-	1165	9.5	12.5	80	510	
12	1165	9.5	12.5	80	523	
1.00	1165	9.5	14	80	537	
2.00	1165	9.5	14	80	551	
3-	1165	9.5	13.5	87	564	
4-	1165	9.5	14	85	578	out
5.	1165	9.5	15.5	85	594	charged overflowing

47 | 594 | 12.6

44 x 6

12.4

94

300

28 4

Total Amps 594

1 hour 47

Average Amps 12.6

Ni face disc.
20 sec. Electric Cleaner, wash in alcohol, commonwater, then rinse with distilled
20 sec. in 8-4, then wash in alcohol and rinse in distilled water, and dry in alcohol.

Put in Ni bath dry, revolve 2 minutes, then full current on. Total amps 450 Ni plated
Put in copper dry, full current on.

4 Bath at 5 30 PM.

July 14, 20.

Time	Sp. Gr	Volts	Amps	Temp	Total	
5 30 PM	1165	9.5	17.	85		
6 30	1165	9.5	17	85	17	
7 30	1165	9-5	14-5	85	31	
8 30	1165	9-5	14-5	85	46	
9-30	1165	9-5	14-5	85	70	
10 30	1165	9.5	14.5	83	85	Transfer from # Ni bath
11 30	1165	9.5	14.5	83	99	
12 30	1165	9.5	[illegible]	[illegible]		
AM	July 15 20.					
1 30	1165	9.5	[illegible]	[illegible]		
2 30	[illegible]	[illegible]	[illegible]	[illegible]		
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		
8 30	1165	9.5	16	81	[illegible]	
9 30	1175	9.5	16	[illegible]	[illegible]	
10 30	1165	9-5	15-5	81	262	
11 30	1165	9.5	15-5	80	278	
12 30	1165	9.5	15.5	80	293	
1 30 PM	1165	9.5	15.5	80	309	
2 30	1165	9.5	16	80	325	
3 30	1165	9.5	15.5	80	340	
4 30	1165	9.5	16.	80	356	

#4 Bath.

July 15, 20.

Time	Sp Gr	Volts	Amps	Temp.	Total
5 30 PM	1165	9.5	16	80	372
6 30	1165	9.5	16.5	83	389
7 30	1165	9.5	16.5	92	405
8 30	1165	9.5	17	92	422
9 30	1165	9.5	17	92	439
10 30	1165	9.5	17	92	456
11 30	1165	9.5	17	92	473
12 30	1165	9.5	17	90	

July 16, 20.

Time	Sp Gr	Volts	Amps	Temp.	Total
1 30 PM	[illegible]	[illegible]			
2 30	1165	9.5			
3 30	1165	9.5			
4 30	1165	9.5			
5 30					
6 30					
7 30					
8 30					
9 30	1170	9.5	17.5	87	642
10 30	1165	9.5	17.5	90	660
11 30	1165	9.5	17.5	91	678
12 30	1165	9.5	16.5	90	694
1 30 PM	1165	9.5	17	89	711
2 30	1165	9.5	17	90	728
3 30					

Out

45 hr

45 | 728 | 16.1

$$\begin{array}{r} 728 \\ \times\ 45 \\ \hline 3640 \\ 2912 \\ \hline 80 \end{array}$$

Total Amp hrs 728

" hours 45

Average Amps 16.1

Put in Copper bath day
full current on.

3 One tree extended
4" out from disc.

4 Bath

Started July 17 20 @ 11 30 AM

Time	Sp gr	Volts	Amps	Temp	Total	
11 30 AM	1165	9.5	16.5	93		
12 30	1165	9.5	16.5	90	16	
1 30	1165	9.5	14.5	90	31	
2 30	1165	9.5	16	95	47	
3 30	1165	9.5	16	95	63	
4 30	1170	9-5	16-5	95	79	Transfer from
5 30	1170	9-5	17	93	96	# 1 Nickel
6 30	1170	9-5	17	90	[illegible]	July 17, 20
7 30	1170	9-5	17	90	130	105 Amp
8 30	1170	9-5	16-5	90	147	Ni Plate
9 30	1170	9-5	17	90	164	
10 30	1170	9-5	17	89	181	
11 30	1170	9-5	17	92	198	
12 30	1170	9-5	17	92	215	
AM	July 18					
1.30	1170	9.5	17	92	232	
2.30	1170	9.5	17	92	249	
3.30	1170	9.5	17	92	266	
4.30	1170	9.5	16	92	282	
5.30	1170	9.5	16	92	298	
6.30	1170	9.5	16	90	314	
7.30	1170	9.5	16	90	330	
8.30	1170	9.5	16	90	346	
9-30	1170	9-5	16	90	362	
10-30	1170	9-5	16	90	378	

46 | 753 × 5 | 16.3

46 | 753 | 16.3

Total amp/hr 753

" hours 46

Average Amp/hr 16.3

#4 Bath

July-18-28

AM	Ohm	Volts	Amp	Temp	Total
11	1170	9-5	16	90	394
12	1170	9-5	16	90	410
PM 1.00	1170	9-5	16-5	92	426
2	1170	9-5	16-5	92	443
3	1170	9-5	16-5	92	459
4	1170	9-5	16-5	94	475
5	1170	9-5	16-5	94	492
6	1170	9-5	17	94	509
7	1170	9-5	17	94	526
8	1170	9-5	17	94	543
9	1170	9-5	18	90	561
10	1170	9-5	18	90	579
11	1170	9-5	17	90	
12	1170	9-5	17		
AM	July 19				
1.00	1170	9.5	17		
2.00	1170	9.5	15		
3.00	1170	9.5	15		
4.00	1170	9.5	15		
5	1170	9.5			
6	1170	9.5	16		0
7	1170	9.5	16		23
8.00	1170	9.5	15.2		53
9	1170	9.5	15	90	53 out
10	1170	9.5	15.5	90	

Sharp Edge Chisel

Put in copper
Revolve 3 minutes, then full
current for 1 hr.

Put in copper dry full current on
Specs formed after 5 hours in Cu Bath

Specs was taken off after
30 hours with plates

Added 800 cc H_2SO_4 at 66°
Bath at 6 PM July 20, 20.

#4 Bath

Started July 19, 20 @ 10 AM

Time	Spec	Volts	Amps	Temp	Total
10 AM	1165	9.5	16	90	
11 –	1165	9.5	16	90	16
12 –	1165	9.5	16	94	32
1.00	1165	9.5	17	94	49
2 –	1165	9.5	17	92	66
3	1165	9.5	17	90	83
4	1165	9.5	17	88	100
5	1165	9.5	17	85	117
6	1165	9.5	17	85	134
7	1165	9.5	17	85	151
8	1165	9.5	14.5	85	165
9	1165	9.5	14.5	85	180
10	1165	9.5	14.5	90	194
11	1165	9.5	14.5	92	209
12	1165	9.5	14.5	92	[illegible]
	July 20, 20.				
1 AM	1165	9.5	15	91	[illegible]
2	1165	9.5	15	91	253
3	1165	9.5	15	90	268
4	1165	9.5	15	90	283
5	1165	9.5	15	90	298
6	1165	9.5	15	90	313
7	1165	9.5	15	90	328
8	1165	9.5	15	90	343
9	1170	9.5	15.5	90	358

Transferred from #2 in Bath, July 19, 20 @ 10 AM

102 amp hr

38 | 597 | 157
38
76
266

Total Amps 597
" hours 38
Average Amp 157

4 Bath

July 27-28 Time	Gas	Volts	Amps	Temp	Total	375
10AM	1165	9.5	15.5	90	373	
11-	1165	9.5	15.5	90	389	
12-	1165	9.5	16.5	95	405	
1 PM	1165	9.5	16.	93	421	
2-	1165	9.5	16	89	437	
3-	1165	9.5	16	89	453	
4-	1165	9.5	16	88	469	
5-	1165	9.5	16.5	88	485	
6-	1180	9.5	16.	88	502	added 800 cc
7-	1175	9.5	15.5	85	518	Ar S.O.4 at 66° Pame
8-	1175	9.5	15.5	80	533	Tr O-fuel bottle
9-	1175	9.5	15.5	80	549	at 6 PM. gas gas
10-	1175	9.5	15.5	80	564	
11-	1170	9.5	17.0	80	581	
12	1170	9.5	16.	80	597	Cut

Copper #51 Copper bath. R.P.M. 53

Nov. 27, 20.

Time	Sp. gr.	Temp.	Volts	Amps	Tot'l	Hours	Remarks.
1 p.m.	12.05	95°	10.5	100			Anode 3 3/4" from
2 p.m.	"	111	10	100	100	1	cathodes, 9 1/4" hole in
3-	"	104	10	100	200	2	rubber disc.
4-	1210	108	10	100	300	3	
5-	"	109	10	100	400	4	This is first disc.
6-	"	110	10	100	500	5	after new cooling coils
7-		106	10	100	600	6	were put in,
8-		106	10	100	700	7	
9-		110	10	100	800	8	out

Very much thicker over disc

H.G.

Analysis of Solution before start.

284.0 B.V. gms per liter

27.71 H_2SO_4 " "

added 2 lb 10 oz B.V. } To make a
" 164 cc H_2SO_4 } standard.

Eyper #52

Dec 28 20.

Time	Equip	Temp	Volt	amp	Total	Remarks
10 30	1195	114	10	100		temperature of
11 30	"	120	10.	100.	100	= 5 Eyper.
12 30	"	108	10.	100	200	
1 30	"	122	10.5	100	300	Eyce pt added 86°
2 30	1200	120	10.5	100	400	#2504
3 30	"	120	11.	100	500	
4 30	"	128	11.5	100	600	
5 30		120	12	100	700	
6 20					800	Out

Experiment 53

Dec. 28, '20.

Experiment #53

Time	Sp. Gr	Temp	Volts	Amps	Time	Hours	Remarks
15 pm	1200	115	9.5	100	+		3 1/8" from anode to
315	"	124	10.5	100	100	1	cathode.
415	"	119	12	100	200	2	9 1/4" hole in rubber diam.
515	"	118	11.5	100	300	3	1/2" from cathode to the
615	1200	120	9.5	100	400	4	rubber baffle which broke
715	1200	120	10.5	100	500	5	the swirl of the solution
815	"	118	11	100	600	6	53 R.P.M. rotating disc
915		112	10.5	100	700	7	14 1/2" anode surface
1015 PM		119	12	100	800	8	Content of Solution

by analysis

299.82 gms B.V. Perkin

29.84 cc. H_2SO_4 " "

Gravity 1205 @ 1207

Height of stress diminishing none over 1/8" high throughout the run.

Experiment 54.

Dec. 29, 20.

Time.	Sp. Gr.	Temp.	Volts	Amps.	Ah.	Hours.
2.15	1200	109	12.5	100		
3.15	"	120	12.5	100	100	1
4.15		133	12.5	100	200	2
5.15		120	13	100	300	3
6.15	1200	125	13	100	400	4
7.15		133	12	100	500	5
8.15		128	13.5	100	600	6
9.15	1200	127	13	100	700	7
10.15		130	12	100	800	8

Exp. #54

Remarks

Duplicate of #53 Exp. except content of solution is 27.12 CdH_2SO_4 [illegible] 270.89 gm. B.V.

Out.

Plating active, bottom disc black, only few nubs, only one 1/8" high nub knocked off edge of disc 7-15.

Too much trees on edges

Dec 30, 20.

Cyper # 55

Time	Spin	Temp	Volt	Amp	Total	Time
10:30	1190	120	14.	100		
11:30		125	13.	100	100	1
12:30		131	14	100	200	2
1:30	1210	119	14.5	100	300	3
2:30	1205	127	14.5	100	400	4
3:30		126	14.5	100	500	5
4:30	1210	119	14.5	100	600	6
5:30		118	13	80	680	7
6:30		122	14.5	95	765	8
7:30		122	13	85	850	9
8:30		126	13	85	935	10
9:30		"	13.	85	1020	11

45/1000 Caliper

OK

Remarks,
Duplicate of #53 Cyper. Except content of solution by an error.
257.74 gms B.V. Per liter
23.60 cc. H_2SO_4.
added 1 lb 14 oz B.V.
" 168 cc H_2SO_4

Out

Run 11 hours @ 100 amp per hour.
Want to get thick disc to finish off the back by Clancy.
Few nubs which may cause pits when they turn down the disc, otherwise good piece.
Measure before turning 55/1000
after turned the disc is 45/1000

#1 Cook Exper 56

Dec 31, 20.

Time	Speed	Temp	Volt	Amps	Size	Remarks
45	1210	91	14.5	20		
P.M.	1210	91		75		3" from anode.
45	1210	94	14	75	75	9½" hole in rubber disc.
45	1205	112	12	75	150	½" from baffle to cathode
45	1210	100	11.5	75	225	which breaks swirl
45	1200	108	11.	75	300	of the solution
45	1200	110	11.5	75	375	50 R.P.M. on disc.
45		110	11.5	75	450	14½" anode surface.
45		100	11.5	75	525	Content of solution
45	1210	113	11.5	75	600	same as Exper #55
45		117	11.5	75	675	Run at 75 amps
45		113	11.5	75	750	till proper thickness
45	1210	115	11.5	75	825	3 metal disc to half
						rubber disc down in place

Caliper 39/1000

New type Polar.

Had to lower baffle 5/8" to clear tube.

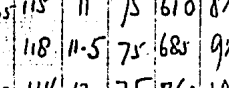
12 15 39/1000

Expert #57

#2 Crock

Dec 31, 20.

Time	Sp. Gr. 1.200	Temp	Volts	Amps 20	Total	Hours	Remarks
11:05			11				3" from anode
12:15	12.00	100	11.5	75			
1:15	"	110	11.5	75	75	1	1/2" baffle to cathode
2:15	"	110	11.5	75	150	2	10 3/4" anode surface,
3:15	12.10	111	11.5	75	225	3	covered by linen screen
4:15		123	11.5	75	300	4	depth of anode shot 1 1/2"
5:15		117	11.5	75	375	5	50 R.P.M. on disc.
6:15	11.95	121	11.5	75	450	6	Content of solution by [illegible]
7:15	11.95	119	12	75	525	7	This cell has a wood
8:15		114	12.5	75	600	8	anode chamber
9:15	11.95	122	12	75	675	9	
10:15	12.00	116	11	75	750	10	
11:15		116	12	75	835	11	Wood anode chamber.



282.73 gms B.V. per liter
25.86 cc. H_2SO_4 "
also added 1 lb 3 oz BV
188 cc H_2SO_4

Check on New Type Rotator, while awaiting for Rubber 9 1/4" disc.

Had to lower baffle 1" to clear tree

31/1000 after turned

Expert #58

Crock 1

Jan. 4, 21.

Time	Sp. Gr.	Temp	Volts	Amps	Total	Hours	Remarks
11	1225	92	8.5	20			3" from anode.
	1205	92	10.5	75	10	1/2	1/2" baffle to cathode.
	1200	115	11.5	75	85	1 1/2	14 1/2" anode surface.
	"	120	11.5	75	160	2 1/2	9 1/4" hole in rubber disc.
	1200	122	11.5	75	235	3 1/2	50 R.P.M. on disc.
	"	120	12	75	310	4 1/2	Start at 20 amps, then
		125	10.5	75	385	5 1/2	raise after 1/2 hour to 50
	1210	118	10.5	75	460	6 1/2	75 amps, run 7 60 amps
	1200	125	10.5	75	535	7 1/2	
	1205	115	11	75	610	8 1/2	Very good surface
	"	118	11.5	75	685	9 1/2	only 1/2" high on edge
	1210	114	12	75	760	10 1/2	Plate granular effects

Stripped and turned down to 37/1000

Cook 11

Jan. 4, 21

Epper #59

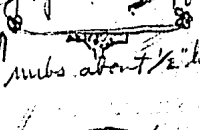
Time	Sp. gr.	Temp	Volts	Amps	Total	Atmos
6[30]	1225	92	8.5	20		
7	1205	92	10.5	75	10	½
8	1200	118	11.5	75	85	1½
9	"	117	11.5	75	160	2½
10	1200	118	11.5	75	235	3½
11	"	118	12	75	310	4½
12[15]	"	124	10.5	75	385	5½
1	1210	128	10.5	75	460	6½
2	1200	127	10.5	75	535	7½
3	1205	115	11	75	610	8½
4	"	119	11.5	75	685	9½
5	1210	113	12	75	760	10½

Remarks

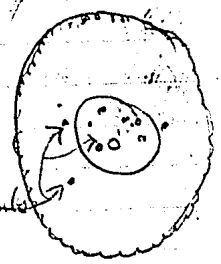
Duplicate of No. 58. Epper.

nubs very much reduced little less than ½" high

Plating granular effect



nubs about ½" high



small nubs

Stripped & turned down 37/1000.

1 pit

#1 Crocle

Jan 4, 21

Epper #60

Time	Sp. gr.	Temp	Volts	Amps	Total	Atmos
	1200	110	12	20		
20	1205	108	12	75	10	½
30	1200	119	12.5	75	85	1½
40	1200	118	13	75	160	2½
50	1200	122	13	75	235	3½
30 PM	"	120	13	75	310	4½
35	1200	110	13	75	385	5½
40	1200	121	12.5	75	460	6½
50	"	120	12.5	75	535	7½
55	1200	121	12.5	75	610	8½
60	1200	119	12.5	75	685	9½
65	1205	121	12.5	75	760	10½

Remarks

Dup of #58 Epper. Except letting solution taper down, less acid and B.V. content.

Analysis of contents.

B.V. = 295.88 gms per liter.

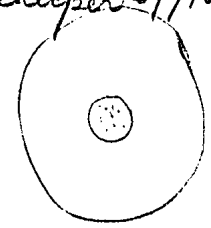
H_2SO_4 = 24.85 cc " "

Motor smoked slightly. Had to cut down to one experiment.

granular Plating, very good surface

gravity 12

Caliper 37/1000

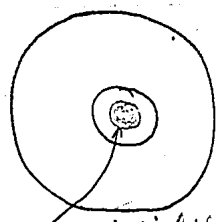


#2 Crock Cyper 61

Jan. 5, 21

Time	Sp.gr.	Temp	Volts	amps	Total	Hours	Remarks
600	1200	110	12	20			Duplicate of #58 Cyper
630	1205	107	12	75	10	½	
730	1200	120	12.5	75	85	1½	
830	1200	113	13	75	160	2½	
930	1200	119	13	75	235	3½	
1030	1200	119	13	75	310	4½	
1130	"	110	13	75	385	5½	
1230	"	110	12	75	460	6½	
130	"	120	12	75	535	7½	Granular Plating
230	1200	125	11	75	610	8½	Very good surface
330	"	122	11	75	685	9½	
430	1195	123	11	75	760	10½	out

Caliper .39/1000



Plated slightly low for about 2" in center due to putting in disc, pocket was in center

#1 Crock. Cyper 62

Jan 5, 21

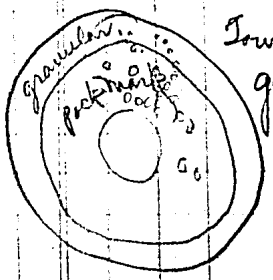
Time	Sp.	Temp	Volts	amps	Total	Hours	Remarks
11a.	1200	110	9	20			
11	1195	112	12	75	10	½	Duplicate of Cyper #58
130	1195	128	11.5	75	85	1½	58 Except that 1/3 the
230	1195	130	12	75	160	2	at 20 then 10½ hrs at 75 amp.
30	"	120	12.5	75	235	3	120°F
30	"	123	13.5	75	310	4	Content by Analysis
30		122	13.5	75	385	5	B.V. 282.03 grs per liter.
30	1200	112	14	75	460	6	H_2SO_4 23.48 cc. " "
30		118	13.5	75	535	7	Gravity 1195 @ 120°F.
30		120	14	75	610	8	No Acid or B.V. added
11 6	1195	110	13.5	75	685	9	to this solution since
11 7	1195	117	13	75	760	10½	Cyper #57
	1195	120	13	75	797	11	out

#2 Rock

Jan. 6, 21. Expt #63

Time	Sp Gr	Temp	Volts	Amps	Total	Hours	Remarks
10 30	1195	120	12	20			Duplicate of #58
11 00	1195	120	12	75	10	1/2	Run same as #62
12 00	1195	120	12	75	85	1 1/2	
1 00	"	124	12.5	75	160	2 1/2	
2 00	1200	126	12	75	235	3 1/2	
3 00	1200	124	12	75	310	4 1/2	
4 00						5 1/2	
5 00						6 1/2	
6 00						7 1/2	
7 00						8 1/2	
8 00						9 1/2	
9 00						10 1/2	
10 00						11	Bottom of rock solution became too cold

Quit
Discard
Solution crystals in bottom of block
Leave all rock in



Toward outside plating granular

#1 Rock

Jan 7, 21. Expt 64

Time	Sp Gr	Temp	Volts	Amps	Total	Hours	Remarks
30	1195	110	12	20			Duplicate of #58
0	"	115	"	75	10	1/2	Run same as 62
1	"	120	"	75	85	1 1/2	Discarded
2	"	"	"	75	160	2 1/2	Quit

Solution crystals at bottom of block

Leave all rock.
Marbled.

#2 Crock

Jan 7 21

Copper #65

Time	Sp Gr	Temp	Volts	Amps	Total	Hours	Remarks
2	1210	118	8½	20			3" Cathode to anode.
2 30	1210	114	11	75	10		¼" Baffle under cathode
3 30		120	11.5	75	85		1½" anode surface
4 30	1210	121	12	75	160		9¼" hole in Maple
5 30		122	12	75	235		disc hole covered with
6 30							linen.
7 30							50 R.P.M. disc rotation
8 30							Start at 20 amps ½ h
9 30							then raise to 75 amps
10 30							at 110-120° F
							Run 11 hours.

Cut out Cadmium Plating

1st Copper with Maple Disc and side to hold same

#1 Crock

Jan 8, 21.

Copper #66

Time	Sp Gr	Temp	Volts	Amps	Total	Hours	Remarks
				20		½	Duplicate
1 30				75	85	1½	of #65 Copper,
2 30	1210	115	13	75	16.0	2½	
3 30	1210	120	13	75	235	3½	
4 30		114	13	75	310	4½	
5 30		126	13.5	75	385	5½	

Crystals at bottom of crock retards the flow of current and

#2 Crock.

Jan. 10 21.

Epper #67

Time	Sp.g.	Temp	Volts	Amps	Time	Amps
3[00]	1180	127	10.5	20		
4[00]	"	121	11.5	75	10	½
5[00]		125	11.5	78	85	1
6		129	12	75	163	2
7		125	12	75	238	3
8		123	12	75	313	4
9		120	12	75	388	5
10		124	12.5	75	463	6½
11	1170	120	12	75	538	7
12	1190	130	12.5	75	613	8
1	1200	120	"	75	688	9
2	"	"	"	75	753	10½
3	1210	130	13.	75	828	11½
4	"	"	"	37	865	12

Remarks

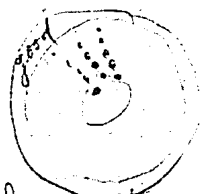
3" from cathode to anode
1/4" baffle under cath.
14½" anode surface
9¼" hole in maple disc,
the hole covered with
linen screen.
Content of solution
244.56 gms BV per liter
21.14 cc H_2SO_4 " "

1st disc after cleaning
out crystals from anode
Some one turned cold water
in cold crock to 50°F

Surface not very
good solution new
not worked in prop.

Caliper after turning by Clancy

43/1000



Jan. 11, 21.

Epper # 68

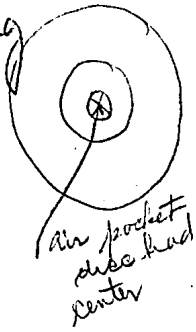
Time	Sp.g.	Temp	Volts	Amps	Time	Amps
4[30] PM	1210	125	12.	20		
5	"	125	"	75	10	½
6	1200	120	12.5	75	85	1½
7	"	125	"	75	160	2½
8		119	14	75	235	3½
9	1195	115	13	75	310	4½
10		120	13	75	385	5½
11	1195	123	13	75	460	6½
12		121	13	75	535	7½
Jan 12 1 AM	1200	123	13	75	610	8½
2		119	13.5	75	685	9½
3	1210	129	14	75	760	10½
3[30]	1205	121	14	75	795	11

Remarks

Clump of #67 Epper

Except run to
795 amps 11 hrs.

out



Caliper after turning by Clancy.

42/1000

#2 Crock
Cu Exper # 69

Jan. 12, 21

Time	Exper	Temp	Volts	Amps	Total	Hours	Remarks
4	1200	118	10	20			Sup. of #67 Exper
4 30	"	113	14	75	10	½	
5 30	1190	115	11	75	85	1	Except run to 797 Amp
6 30	"	120	11	75	160	2	11 hours
7 30	"	120	11	75	235	3	
8 30	1200	"	12	75	310	4	granular surface
9 30	"	"	12	75	385	5	
10 30	1200	125	11.5	75	460	6	
11 30	1210	"	11.5	75	535	7	
12 30	"	"	11.5	75	610	8	
1 30	"	"	11.5	75	685	9	
2 30	1200	[illegible]	11.5	75	760	10½	
3 00	"	[illegible]	11.5	37	797	11	

Steam was turned off between 6 3/12 AM & 8 30 by someone
cant find reason, solution crystalized at bottom of cu
Mould bent due to not stripping good.

Could not turn account of to much heat.

#1 crock Exper # 70

Jan. 13, 20

Time	Exper	Temp	Volts	Amps	Total	Hours	Remarks
8 15	1210	118	9	20			To see what, how
8 45	1205	118	12	75	10	½	acid content would
9 45		120	12	75	85	1½	make.
10 45	1210	120	12	75	160	2½	Content of solution
11 45	1200	125	12	75	235	3½	294.84 gm B.V. per liter
12 45	"	125	12	75	310	4½	20.05 cc H_2SO_4 "
1 45	1200	127	12	75	385	5½	due to someone
2 45		120	12	75	460	6½	turning off steam
3 45	1200	125	12	75	535	7½	and had to clean
4 45	1195	122	12	75	610	8½	out #2 Crock
5 45	1200	120	12	75	685	9½	which was very much
6 45		120	12.5	75	760	10½	crystalized.
7 45		120	12	75		11	Temperature of crock
							fell to 85° F.

#70 Exper

This disc very rotten very much trees at edge and " " nubs from 1" of outer edge to center of disc, center of disc little better than

Removed trees from outer edge was 3/4" long.

Some nubs 1/8" high

Very much good nubs

Experiment # 71

Jan 14, 21.

Time	Sp Gr	Temp	Volts	Amps	Time	Hours	Remarks
6 45	1210	116	8.5	20			
7 15	1200	111	12.5	75	10	½	
8 15		121	13	75	85	1½	
9 15	1200	122	14	75	160	2½	
10 15		120	13.5	75	235	3½	
11 15	1200	120	13	75	310	4½	Content of solution
12 15	1200	122	13	75	385	5½	294.84 gms B.V.
1 15	"	119	13.5	75	460	6½	per liter
2 15	"	125	13.5	75	535	7½	20.05 cc H_2SO_4
3 15	"		13.5	75	610	8½	per liter
4 15	1205			75	685	9½	added 200 cc H_2SO_4
4 45				75	760	10½	to fetch acid up to
5 45				75	845	11	25 cc per liter!

Calipers 36/1000

OK

Jan 14, 21

Exper # 72

Time	Sp. Gr	Temp	Volts	Amps	Time	Hours	Remarks
10	1190	125	12.	20			
	1190	130	"	75	10	½	
		"	"	75	85	1	
	1195	"	12.5	75	160	2	Content of solution
		"	"	75	235	3	283.41 B.V. gms per liter
	1200	132	"	75	310	4	23.34 H_2SO_4 cc " "
	1200	130	"	75	385	5	added 80 cc H_2SO_4
	1200	125	13.5	75	460	6	to make 25 cc H_2SO_4
	"	127	12.5	75	535	7	per liter.
	1205	128	12.5	75	610	8	
	1200	131	12.5	75	685	9	
	"	128	12.5	75	760	10½	
AM		127	12.5	75	845	11	out

Cause

This mould slipped while on the lathe raising a ding in the label and had to turn down to make a clean surface, which when calipered measured 30/1000

Calipers OK

30/1000

New Steam Coil

Jan. 15, 21.

Epper #73

Time	Sp.gr.	Temp	Volts	Amp	Total	Hrs	Remarks
1	1200	112	9	20			Duplicate of # 72 Epper,
130		120	12	75	10	1/2	
2 30	1200	125	12.5	75	85	1	
3 30		116	14	75	160	2	
4 30	1205	119	13.5	75	235	3	
5 30		124	13.5	75	310	4	Content of Solution
6 30		124	13.5	75	385	5	265.70 gms B.V. Per liter
7 30		140	14	75	460	6	19.50 cc H_2SO_4. "
8 30	1205	129	13.5	75	535	7	added 2 lb 2 oz B.V.
9 30		136	13.5	75	610	8	" 264 cc H_2SO_4
10 30		133	14	75	685	9	To make solution
11 30	1195	130	14	75	760	10 1/2	285. B.V. + 25 cc H_2SO_4
12		133	14	37	797	11	out

Put in new Steam coil

37/1000 thick

OK

Pump packed 4 times

5 cells eaten away

Jan. 17, 21

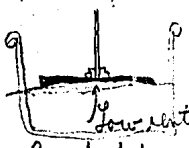
Epper #74

Time	Sp.gr.	Temp	Volt	Amp	Total	Hrs	Remarks
12	1200	130	11	20	10	1/2	
12	"	135	"	75	85	1 1/2	Content of solution
2	1210	140	11.	75	160	2	242.27 gms B.V. Per liter
3	1190	130	12	75	235	3	18.26 cc H_2SO_4 " "
4	1190	125	12.5	75	310	4	added 3 lb 4 oz B.V.
5	1195	135	12.5	75	385	5	" 296 cc H_2SO_4
6	1195	135	12.5	75	460	6	to make sol. 285. B.V. + 25 cc H_2SO_4
7	"	"	"	75	535	7	
8	1198	130	13.	75	610	8	Taper of disc 1/2"
9	1 "	132	13.	75	685	9	to the foot
10	1200	135	"	75	760	10 1/2	
10 30	"	"	"	37	797	11	

Tapered disc because of a hollow center when moulds put in if they were the least bit concave they would carry a low plated center.

40/1000

OK



Low center holds an air pocket when put down perpendicular. Reason why not put the disc.

[ITEM(S) FOUND IN BOOK]

#12 Infared Expw

No Crystals in beaker 1250 @ 92° Centigrade = 197 °F
Crystals in beaker 1220 @ 75° Fahr.

Jan. 18, 21. Expt #75

TIME	Sp. Gr.	Temp	Volts	Amps	Total	Hrs.	Remarks
10 –	1190	125	10	20			Duplicate of #74
10 30	"	130	12	75	10	½	
11 30	"	135	12	75	85	1½	Content of solution
12 30	"	140	13	75	160	2½	287.43 B.V. gms per liter
1 30	1200	140	13	50	230	3½	24.44 H_2SO_4 " "
2 30	"	140	"	50	280	4½	
3 30	"	145	13.5	60	330	5½	added 2 lbs B.V.
4 30	1190	"	"	60	390	6½	" 150 cc H_2SO_4
5 30	"	"	"	65	450	7½	
6 30	"	"	14	75	515	8½	
7 30	1200	140	"	75	590	9½	
8 30	1190	130	"	75	665	10½	
9 30	"	135	14.5	75	740	11½	
10 30	"	"	"	75	815	12	

Due to crystals in bottom of cracks current at 50 amps

Repairmen turned off steam & pumps

Changed to another circuit and current stood OK

Door was locked and repairmen had to cut fence next morning. Tape wide open. Off and pump stopped

Jan. 19, 21. Expt #76

Time	Sp. Gr.	Temp	Volts	Amps	Total	Hrs.	Remarks.
	1210	130	19	20			Had no insulated disc so took a female which turns, but Mr Edison can then give it in for protection
	"	132	10	75	10	½	
	"	135	"	75	85	1½	
	1200	135	10.	75	160	2½	Content of solution
	"	135	10.	75	235	3½	278.84 gms B.V. Per liter
	"	138	10.5	75	310	4½	28.22 cc H_2SO_4 " "
	"	135	10.5	75	385	5½	added 1 lbs B.V.
	"	132	10.5	75	460	6½	
	"	130	10.5	75	535	7½	
	"	135	10.5	75	610	8½	
	"	138	"	75	685	9½	
	"	140	"	75	760	10½	
	"	"	"	37	797	11	Out.

Calyx 36 | 1000 OK

OK

The wood angle piece broke off in the disc, which holds disc, in bath and let made new

Jan. 20, 21. Epper #77

Time	Sp. Gr.	Temp	Volt	Amp	Total	Hrs	Remarks.
2	1195	135	10.	20			
2 30	"	140	10.	75	10	1/2	Content of solution
3 30	1190	137	10.	75	85	1 1/2	278.84 gms B.V. Per liter
4 30	1195	135	10.	75	160	2 1/2	2279 cc H_2SO_4 " "
5 30	"	132	"	75	235	3 1/2	added to the 11 gi
6 30	1190	135	11	75	310	4 1/2	11 oz. B.V.
7 30	"	140	"	75	385	5 1/2	9 cc H_2SO_4
8 30	"	140	11.	75	460	6 1/2	Mr Edison Memo
9 30	1195	135	11.	75	535	7 1/2	Female which has be
10 30	"	135	11.	75	610	8 1/2	pulled off, raw i
11 30	1200	"	11.5	75	685	9 1/2	Ni bath 60 Amps by
	"	135	12.	75	760	10 1/2	Mc Mullen then back
	1190	"	12.	37	797	11	up in 75 Amp Copper
							bath to 797 Amps
							Out turned down and
							make 2 test prints
							to see if any trouble
							arises.

Cal. Epper 36 | 1000

Epper #78

Jan. 24, 21.

Sp. Gr.	Temp	Volt	Amp	Total	Hrs	Remarks
1190	135	11.	20			This is experiment
"	135	11.	75	10	1/2	#12 Ni face
1195	"	11.5	75	85	1 1/2	To be turned and
1190	"	11.5	75	160	2 1/2	2 prints made
"	"	11.5	75	235	3 1/2	to see if any
1195	130	12.	75	310	4 1/2	trouble arises, as
"	130	12.	75	385	5 1/2	per memo of Mr Edison
			75	460	6 1/2	Except did not put
			75	535	7 1/8	the regular nickel
			75	610	8 1/2	bath raw in last
			75	685	9 1/2	plate Ni bath 6 hrs
			75	760	10 1/2	to 60 Amp.
			35	795	11.	Out

Steam coil eaten through 1 hr before run finished

Cal. 1000

2nd disc from Rubber jar

1st disc after angle of disc was changed 3/4" to foot

3/4" Foot

Jan. 25, 21. Epper #79

Time	Sp. Gr.	Temp.	Volt	Amp.	Total	Hrs	Remarks
4.15	1195	135	10.	20			
5.15	"	"	10.	75	10	1	See what difference
6.15	1200	140	11.	75	85	2	and shake against
7.15	"	"	11.	75	160	3	the crocheny jar.
8.15	"	"	11.	75	235	4	and steam coil in
9.15	1195	"	11.	75	310	5	wood tank to heat
10.15	"	"	11.	75	385	6	Content of solution
130	"	135	11.5	75	460	7	289.52 gms BV per liter
230	1200	"	"	"	535	8	1.2 Hg cc H_2SO_4 " "
330	1190	"	"	"	610	9	added 450 cc H_2SO_4 to
430	"	"	"	"	685	10	make standard
530	1195	"	"	"	760	11	

Pt Epper, N

" "

New Rubber Jar

Caliper 43 | 1000

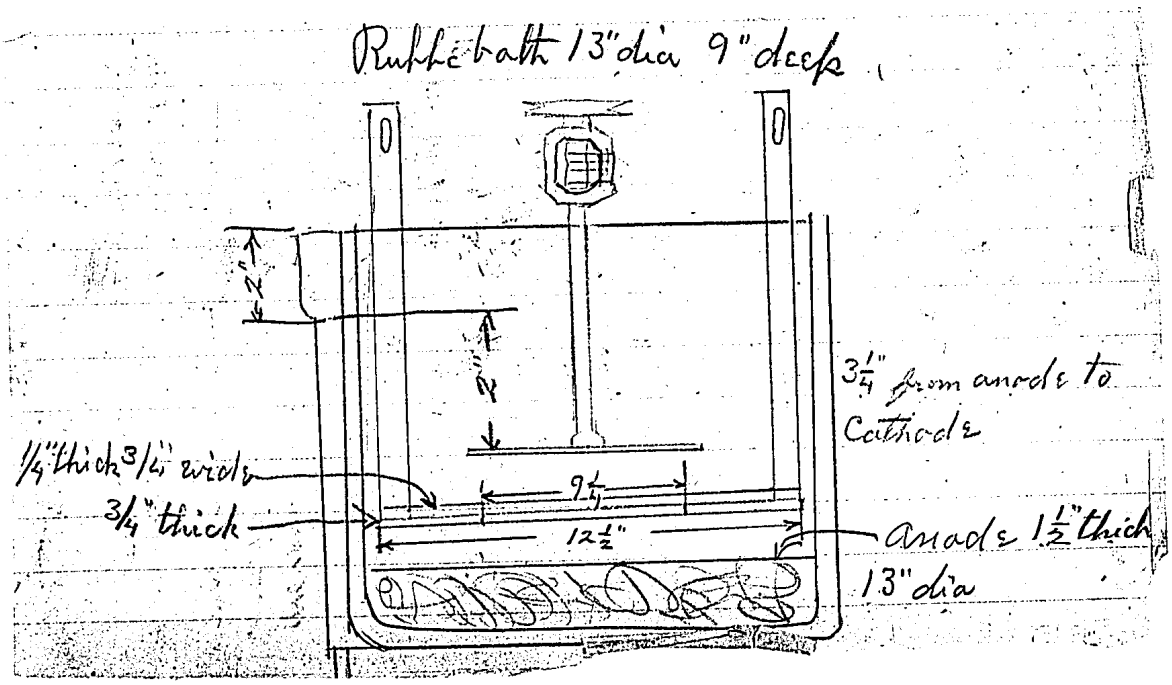
Epper #80

Time	Sp. Gr.	Temp.	Volt	Amp.	Total	Hrs	Remarks.
30	1200	130	10.	20			Duplicate of Epper #79
45	"	"	10.	75	10	1/2	
5	"	"	10.	"	85	1 1/2	
15	"	135	10.5	"	160	2 1/2	
30	1195	"	10.5	"	235	3 1/2	
45	1200	"	10.5	"	310	4 1/2	Content of Sol
8	"	130	11.	"	385	5 1/2	297.76 BV gms per Liter
9	"	135	11.	"	460	6 1/2	2224 H_2SO_4 cc " "
10	"	"	11.5	"	535	7 1/2	added to make standard
11	"	140	12.	"	610	8 1/2	pol. 116 cc H_2SO_4
12	"	145	12.5	"	685	9 1/2	Crystalized at bottom
1	1195	140	"	"	760	10 1/2	after run was finished.
30	"	140	1	37	797	11	Plating before turned
							CK grammar

Caliper 43 | 1000

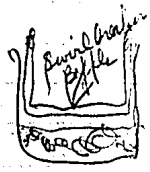
Very good

[ITEM(S) FOUND IN BOOK]



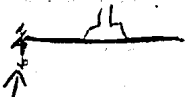
Expert # 81

Time	Sp gr	Temp	Volt	Amps	Total	Hrs.	Remarks
1 30	1190	135	9.	20	10	½	Duplicate of # 80
2	"	140	"	75	10	½	Except not disc
3	"	140	9.	75	85	1½	jar with filter sl
4	1200	145	8.5	75	160	2½	9½" marble disc
5	1190	150	"	75	235	3½	taken out.
6	"	152	"	75	310	4½	
7	"	150	"	75	385	5½	
8	1200	"	9.	75	460	6½	
9	1190	"	"	75	535	7½	
10	"	"	9.5	75	610	8½	
11 20	"	"	"	75	685	9½	
12	"	"	"	75	760	10½	
12 30	"	"	"	37	797	11	Out.



28/1000 thick

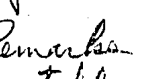
too thin for use



Now much tr. is 1/2 perfectly rough plate

Content of Sol
299.41 gms BV Per Liter
17.03 H2SO4 cc " "
add 336 cc H2SO4 to 2 liter water

Feb 2, 21 — Expert # 82

Sp Gr	Temp	Volt	Amps	Total	Hrs	X	Remarks
1190	140	6	20				New table as it
"	130	9.5	75	10	½		will be for regular
"	140	"	"	85	1½		Production.
1200	"	"	"	160	2½		
1190	140	"	"	285	3½		Anode in 10 3/4" Maple box
"	"	"	"	310	4½		
"	137	"	"	385	5½		1½" X 10 3/4" anode
"	135	"	"	460	6½		
"	137	"	"	535	7½		Had to take off bends
"	140	"	"	610	8½		at outer edge.
1200	"	"	"	685	9½		
1191	"	"	"	760	10½		
"	137	"	37	797	11		Out

This is first disc at new table

41/1000 after turning

OK

Feb 3 21 Eyper #83

Time	Sp. Gr.	Temp	Volt	Amp	Tot	Hrs	Remarks
9 30	1190	130	8.5	20			Duplicate of #82 Eyper.
10	"	"	"	75	10	1/2	
11	"	135	12	75	85	1 1/2	
12	"	"	10	75	160	2	Content of Sol
1	"	135	"	75	285	3	273.49 B.V. gms per liter
2	"	137	13	"	310	4	26.50 H_2SO_4 cc " "
3	"	135	11.	"	385	5	add 1 lb B.V. to make standard Sol
4	"	"	13	"	460	6	
5	"	135	9.5	"	535	7	
6	"	"	"	"	610	8	
7	"	"	"	"	685	9	
8	"	"	"	"	760	10 1/2	
8 30	"	"	"	"	797	11	Cut

43/1000 after turned

OK

Feb 4 21. Eyper # 84

Time	Sp. Gr.	Temp	Volt	Amp	Tot	Hrs	Remarks.
9 30	1190	135	9.	20			
	"	"	"	75	10	1/2	Raised cracks so
	"	"	8.5	75	85	1 1/2	that anode is 2"
	"	"	"	75	160	2 1/2	from cathode. Ex-
	"	"	"	75	285	3 1/2	pect if nubs will
	"	"	12.	75	310	4 1/2	be eliminated.
12	"	"	8.	75	385	5 1/2	Content of solution
	"	"	8.	75	460	6 1/2	gms B.V. Per Liter
	"	140	8.	75	535	7 1/2	OK cc H_2SO_4 " "
	"	135	8.	75	610	8 1/2	
	1205	132	12.	75	685	9 1/2	
	1190	132	8.	75	760	10 1/2	
30	"	"	8.	37	797	11	Cut

43/1000

Took one cut steel tool to " " diamond " to finish

" " man says it generally takes 2 to 3 cuts for steel tool before cutting on facing with diamond tool

OK

Feb. 5, 21.

Exper. #85

Time	Sp. Gr.	Temp.	Volt	Amp.	Total	Hrs.	Remarks
5 30	1190	132	8	20			Duplicate of #84
6	"	"	9	75	10	½	Exper
7	"	"	9	75	85	1½	
8	"	135	"	75		2½	
9	"	"	"	75		3½	
10	"	132	"	75		4½	
11	"	"	"	75		5½	
12	"	135	11.5	75		6½	
1	1200	"	"	75		7½	
2	"	"	10	75		8½	
3	"	"	"	75		9½	
3 30	"	"	"	75		10½	
4 30	"	"	"	75	797	11	

Caliper 47/1000

Feb. 8, 21

Exper. #86

Time	Sp. Gr.	Temp.	Volt	Amp.	Total	Hrs.	Remarks
5 30	1190	130	9	20			
6	"	"	12	75	10	½	Refilled anode
7	"	135	"	75	85	1½	chamber. 4 Exper-
8	"	139	"	"		2½	iments made and
9	"	145	"	"		3½	shot used up equal to
10	"	"	"	"		4½	¼" thick × 10¾" surface.
11	"	"	9.	"		5½	This disc is 2"
12	"	140	9	"		6½	from anode.
1	"	"	12	"		7½	Removed baffle to
2	"	"	"	"		8½	see what happens.
3	"	"	"	"		9½	
3 30	"	"	"	"		10½	
4 30	"	"	"	"	797	11	Out

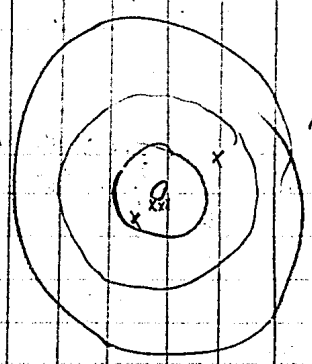
New copper heating coil to solution line put in last one stood 8 weeks.

Caliper 42/1000

Picks up dirt at center makes rougher plating than when the baffle was in other side plated good

Exper #87

Time	Spec	Temp	Volt	Amp	Total	Hrs	Remarks
930	1190	135	9	20			Cathode 2" from
4	"	"	12	75	10	1/2	anode, removed
5	"	"	"	75	85	1 1/2	the baffle, which
6	"	"	"	"		2	stops the swirl
7	"	"	"	"		3	to see what hap
8	"	"	11	"		4	
9	"	"	11	"		5	This is a duplica
10	"	"	"	"		6	of Exper #86.
11	"	"	"	"		7	
12	"	140	9.5	"		8	
1	"	"	"	"		9	Picks up small
2	"	135	"	"		10 1/2	particles dirt which
3	"	"	"	37	797	11	makes nubs that
							show up as pitting
							when turned by lathe



Caliper
41/1000

Feb 9, 21 — Exper #88

Time	Spec	Temp	Volt	Amp	Total	Hrs	Remarks
	1200	135	9.5	20			Transfer from
	"	"	"	75	10	1/2	from Exper #46
	"	"	"	"	85	1 1/2	tri plate
	"	"	"	"		2 1/2	Cam metta
	"	"	"	"		3 1/2	Kilsby Spalding
	"	"	"	"		4 1/2	Rev 1 1/2" from anode
	"	"	"	"		5 1/2	No baffle to stop
	"	"	"	"		6 1/2	swirl
	5.6	10.21	"	"		7 1/2	1 hr at 10 Amps
				"		8 1/2	1 " " 60 "
						9 1/2	Then in copper backing
						10 1/2	to 797 Amps
					797	11	1 hour at 20 Amps
							10 1/2 " " 75 Amps
							then strip and make
							2 Prints for test sheet

Content of sol
295 gms B.V. Per liter
26 cc H_2SO_4 per liter

Match up Exper #91
with Exper 88

Feb. 10, + 11, 21. Eyper #89

Time	Sp Gr	Temp	Volt	Amp	Total	Hrs	Remarks
~~9:30~~	1180	95	9.	20			Mr Pullin sent
10	"	"	12.	75	10	1½	Memo to Mr Edison
11	"	"	13.	75	85	1½	asking to make a
12	"	"	"	68	160	2½	special accumu
1	"	"	"	69	228	3½	of foot plating, ob
2	"	"	"	72	297	4½	for a convention
3	"	"	"	73	369	5½	of Masons on th
4	"	"	"	72	442	6½	Name Pilgrims Chorus
5	"	"	"	75	514	7½	male quartet
6	"	"	12.5	75	589	8½	Mould # 3333-B
7	"	"	"	78	664	9½	Content of Sol
8	"	"	"	75	742	10½	290.0 gms B.V. P_2O_5
9	"	"	"	75	797	11½	22.65 cc H_2SO_4 " "
10	"	"	"	37	862	12	add 700 cc H_2O
11							" 112 cc H_2SO_4
							make standard.

Mr faced in regular bath
This master to make a working female

OK

Eyper #90

Time	Sp Gr	Temp	Volt	Amp	Total	Hrs	Remarks
							Making a working mould from Eyper #89
							mould # 3333B1.
							Transferred from Eyper #48

Started 20 amps for 1½ hrs.
then 75 amps for 10½ hrs.
Ran 75 for 11 hrs
97 Amp²

OK

This working female made a working mould & gave to Mr Pullin Feb. 12, 21.

OK

Feb. 11 21. Expert #91

Time	Sp Rev	Imp	Volt	Amp	Total	Hrs	Remarks
10.20	1200	135	9.	20			Transfer from
11		"	10.05	75	10	1/2	Expert #46 A Mibet
12		"	"	"	85	1 1/2	fast plating.
1		"	"	"		2 1/2	
2		"	"	"		3 1/2	
3		"	"	"		4 1/2	Match up for test
4		"	"	"		5 1/2	#88 Expert Lot permit
5		"	"	"		6 1/2	#91 " " Malea 2
6		"	"	"		7 1/8	printer from Lot.
7		"	"	"		8 1/2	
8		"	"	"		9 1/2	
9		"	"	"		10 1/2	
9.30		"	"	"	799	11.	end

Mr Edison has them tested carefully

Expert #91

Time	Sp Rev	Imp	Volt	amp	Total	Hrs	Remarks
11.30	1205	85	10.	20			Number 3431 C.
12.	"	85	12			1/2	Making a working
1	"	85	12			1 1/2	female to produce
2	"	85	"			2 1/2	10 working moulds
3	"	85	12.5			3 1/2	Pagliacci Prologue
4	"	"	12.5			4 1/2	T. Chambers
5	"	"	12.5			5 1/2	
6	"	"	12.5			6 1/2	
7	"	"	"			7 1/2	
8	1200	90	"			8 1/2	
9	"	"	"			9 1/2	
10	"	"	"			10 1/2	
11	"	95	"			11 1/2	
12	"	"	"			12 1/2	
1	"	"	"			13 1/2	
2	"	"	"			14 1/2	
3	1200	80	13.			15 1/2	
4	"	"	"			16 1/2	
5	"	"	"			17 1/2	
6	"	"	"			18 1/2	
7	"	"	"			19 1/2	
8	"	"	"			20 1/2	
9.30						21 1/2	
11						22 1/2	
10.30						23 1/2	
						24 1/2	

Ran to 12.1 0 Amps 2 1/2 hrs after first 4 hrs.

Steam was shut off half through

Made a cold water plate

Person for 19 1/2 hrs to finish

Sunday Feb. 13, 20 Eyp 93

Temp average 85° FAHR.

24½ hrs

121 amps

Cold Plate Mat to Eyper #92

34931 G1 Female

OR Dripping to keating condition

Cold Plating

Feb. 15, 21 Eyper #94

Time	Sp Gr	Temp	Volts	Amps	Total	Hours	Remarks
AM			60				
			60				

Run 1½ hour at 10 amps

" 10½ " " 75 "

Transferred from Eyper #49 Mi plate

Female 6 month old working mould

for # 34931 G-1

44,000 gave McPallin working mould

Feb. 16, 21.

M. Turner

Feb. 17, 21 — Experiment #95

Time	Sp. gr.	Temp	Volt	Amps	Total	Hrs	Remarks.
9:30	1200	130	9	20		½	
10	"	"	11	7.5	10.85	½	Keep temp above
11	"	"	10.5	"		1½	130°F & not over 145
12	"	"	"	"		2½	Want to see if the
1	1240	"	"	"		3½	nubs will be
2	1200	135	"	"		4½	eleminated.
3	"	"	"	"		5½	
4	"	140	"	"		6½	Did not do it
5	"	"	"	"		7½	nubs same as
6	1210	135	"	"		8½	usual, other
7	1200	130	"	"		9½	part OK, plate
7:30	"	"	"	7.5	7.97	10½	Out
8:30	"	"	"	37	797	11½	

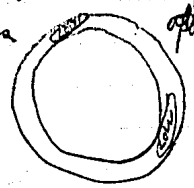
OK Plate

Had to knock nubs off after 9 hrs plated

Feb. 18, 21 — Experiment #96

Time	Sp. gr.	Temp	Volt	Amps	Total	Hrs	Remarks.
9:30	1200	130	9	20			
10	"	"	10.5	7.5	10	½	Keep amps at
11	"	"	"	"	85	1½	7.5 as constant as
12	1205	135	"	"		2½	possible, Want to
1	1200	"	"	"		3½	see what effect
2	"	"	"	"		4½	it has if any to
3	"	"	"	"		5½	eleminate nubs.
4	1205	"	"	"		6½	
5	"	130	"	"		7½	Nubs appeared
6	"	"	"	"		8½	same as usual,
7	"	"	"	"		9½	other part plated
7:30	"	"	"	"		10½	OK, Except two
8:30	"	"	"	37	797	11	low spots showed
							up at outer margin,
							Female did not have
							the defect, Showed
							Mr Edison and he said
							probably solution got
							under some holes.
							Had to knock off nubs
							after 9 hrs plated

OK plate.



Will try this Exp over to see if low spot repeats. See Experiment #99

Feb. 21, 21. Eggert #97

Time	Sp. Gr.	Temp.	Volts	Amp.	Total	Hrs.	Remarks
9.30	1220	130	9	20			
10	"	"	10.5	75	20	1/2	Try to get rid of
11	"	"	10	"	85	1 1/2	nubs,
12	"	"	"	"		2 1/2	Keep gravity at
1	"	"	"	"		3 1/2	1220 ~~at 130°~~
2	"	"	"	"		4 1/2	
3	"	"	"	"		5 1/2	~~[illegible]~~
4	"	"	"	"		6 1/2	The nubs have
5	"	"	"	"		7 1/2	slightly changed
6	"	"	"	"		8 1/2	their form, are
7	"	"	"	"		9 1/2	more closely pl
8	"	"	"	"		10 1/2	
8.30	"	"	"	"	797	11	

Plating OK
Had to knock off the nubs after 9 hrs plated

Feb. 23 21. Eggert #98

Time	Sp. Gr.	Temp.	Volts	Amp.	Total	Hrs.	Remarks
9.30	1230	130	8.5	20			Try to get rid of
10	"	"	9	75	10	1/2	nubs Keep gravity
11	"	"	"	"	85	1 1/2	at 1230 at 130°
12	"	"	"	"		2 1/2	
1	"	"	"	"		3 1/2	
2	"	"	9.5	"		4 1/2	
3	"	"	"	"		5 1/2	
4	"	"	"	"		6 1/2	
4.45	"	"	9	75		7 1/2	~~[illegible]~~
5	"	"	"	"		8 1/2	
6	"	"	"	"		9 1/2	
7	"	"	"	"		10 1/2	
7.30	"	"	"	"	797	11	Cut

Plating OK
Had to knock off the nubs after 9 hrs plating.

Feb. 24, 21

Copper #99

Time	Sp. Gr.	Temp	Volt	Amps	Sol	Hrs.	Remarks
2	1200	130	10.	20			Duplicate of Copper #96
230	"	"	10.	75	10	1/2	
330					85	1/2	Watch for low spot on outer margin.
430						2 1/2	
530						3 1/2	
930						4 1/2	Regular gravity & content
1030						5 1/2	
1130						6 1/2	290 CuSO4 } 1280 @
1230						7 1/2	27 H2SO4 } 130°F
130						8 1/2	
230						9 1/2	
330						10 1/2	
4						11	

#5269-A
Easter Supplement
March 1, 21

Take out at 5:30 p.m.

Copper #100

Time	Sp. Gr.	Temp.	Volt	Amps	Amp Hrs.	Hrs.	Remarks
12	1225	130	10	75	200		Working tank to furnish new solid copper
1230	1220	"	"	"	275	1	
130	"	"	"	"	350	2	Anode chamber in
230	"	"	"	"	425	3	Cloth + maple baffle
330	"	"	"	"	500	4	Connected to anode
430	"	"	"	"	575	5	Broked up with 200
530	"	"	"	"	650	6	Amps. in, regular
630	"	"	"	"	725	7	Bath before first
730	"	"	"	"	800	8	plating
830							

1st Easter Selection

Easter Supplement # 5269-B
March 1/21

Experiment 10

Time	Sp. gr.	Temp.	Volt	Amp.	Total	Hrs.	Making measure
10 00	12 25	130	10	75	200		female. Wood
11		"	"	75	275	1	anode chamber
12		"	"	75	350	2	maple bottle in
1		"	"	75	425	3	wood syringe
2		"	"	75	500	4	fastened to it,
3		"	"	75	575	5	backed up pipes
4		"	"	75	650	6	200 amp. then fair
5		"	"	75	725	7	plate
6 00				75	800	8	Start

2nd Easter Selection

Easter Supplement # 5269 C
March 1/21

Experiment 10

Time	Sp. gr.	Temp.	Volt	Amp.	Total	Hrs.	Remarks
10	12 25	130	10	75	300		Backed up with
11	12 05	130	10	75	375	1	200 amps reg. both
11	12 10	130	10	75	450	2	then fast plate
12	12 15	130	10	75	525	3	in bath with
1 30	12 20	130	10	75	600	4	maple anode chamber
2 30	12 24	130	10	75	675	5	+ baffles on uprights
3 30	12 26	130	10	75	750	6	[illegible]
4 30	12 27	130	10	75	825	7	500 c.c. of water to
							find. Lost of evaporation
							at 10 30, 1000 c.c.
							of water. at 11 30
							added 1500 c.c. of
							water

3rd Easter Selection

Easter Supplement
#4336 C
March 1.20

Exp 103

Time	Sp Gr	Temp	Volt	Amp	Total	Hrs	Remarks
5 30	1215	130	10	75	300		Melting Mastic from
630	12 05	"	"	75	375	1	back up reg bath
730	12 10	"	"	75	450	2	3.00 Amp hr. Reg.
830	12 15	"	"	75	525	3	bath then fast
930	12 20	"	"	75	600	4	plate - polish
1030	12 24	"	"	75	675	5	rubber anode
1130	12 26	"	"	75	750	6	chamber - Maple
1230	12 27	"	"	75	825	7	baffle. At 9 30 P.M.
							added 500 c.c.
							of water to chamber
							rate of evaporation
							At 10 30 1000 c.c
							of water. At 11 30
							added 1500 c.c. of
							water.
							Bath with
							rubber anode
							chamber - lead
							and closed, not
							give free formation

4th Easter Solution

Easter Supplement
#3133-C
Mar. 2/21

Exp 104

Time	Sp Gr	Temp	Volt	Amp	Total	Hrs	Remarks
45	12 15	130	10	75	235		Making Lead
45	12 22	130	10	75	310	1	formate. Back up
45	—	"	"	75	385	2	reg. bath 235 Amp hr.
45	1220	"	"	75	460	3	7 hrs fast plate -
45	"	"	"	75	535	4	Rubber anode
45	"	"	"	75	610	5	chamber. At 11 45
45	"	"	"	75	685	6	added 500 c.c. water
45	"	"	"	75	760	7	
45					835	8	Out

5th Easter Solution

Easter Supplement
4336-B
Mar. 2/21

Exp. 104

Time	Sypn.	Temp.	Volt	Amps	Total	Hrs.	Remarks.
10 45	1225	130	10	75	235		making Master,
11 45	1222	130	10	75	310	1	female. Cap.
12 45	1220	"	"	75	385	2	exp. leg. bath,
1 45	1220		"	75	460	3	with 2.35. Then
2 45	1220		"	75	535	4	fast plate. Wrm
3 45	"		"	75	610	5	anode chamber.
4 45	"		"	75	685	6	At 11:45 added
5 45	"		"	75	760	7	1500 c.c. water.
6 45				75	835	8	Out

6th Easter Selection

Easter Supplement
4002B-1

Exp. 105

Time	Sypn.	Temp.	Volt	Amps	Total	Hrs.	Remarks.
10	1229	130	10	75	125		master, female
	1222	130	10	75	200	1	making warming
	1222	130	11	75	275	2	model. At 7 I
0	1223	130	10	75	350	3	added 500 c.c. of
1	1223	130	10	75	425	4	water, at 8 500 c.c.
V	1223	130	10	75	500	5	and 1500 warm h.
10	1220	"	"	75	575	5½	after.
030	"	"	"	75	650	6½	
030	"	"	"	75	725	7½	
030	"	"	"	75	800	8½	Out

7th Easter Selection

Expm #106

Time	Sp Gr	Temp	Volt	Amp	Total	Hrs.	Remarks
3	1220	130	10	20			Working female
3:30	"	"	"	75	10	1/2	#5264 A
4:30	"	"	"	"	85	1 1/2	from #56 Exp
5:30	"	"	"	"	160	2 1/2	tri face
6:30	"	"	"	"	235	3 1/2	Back up 11 hr
7:30	"	"	"	75	310	4 1/2	lu.
8:30	1210	"	"	"	385	5 1/2	
9:30	1212	"	"	"	460	6 1/2	
10:30	1218	"	"	70	530	7 1/8	
11:30	1219	"	"	70	600	8 1/2	
12:30	1222	"	"	70	670	9 1/2	
1:30 AM	1219	"	"	70	740	10 1/2	
2 AM	"	"	"	70	810	11	Out 3:30
							add 1 1/2 hr.

8th Easter Selection

Expm #107

Time	Sp gr	Temp	Volt	Amp	Total	Hrs	Remarks
2	1220	130	10	20			Working female
2:30	"	"	"	75	10	1/2	#4336 A
3:30	"	"	"	"	85	1 1/2	from Expm #57
4:30	"	"	"	"	160	2 1/2	tri face.
5:30	"	"	"	"	235	3 1/2	Back up 11 hrs
6:30	"	"	"	"	310	4 1/2	lu.
7:30	"	"	"	"	385	5 1/2	
8:30	1210	130	10	"	460	6 1/2	
9:30	1212	"	"	"	535	7 1/2	
10:30	1218	"	"	70	605	8 1/2	
11:30	1219	"	"	70	675	9 1/2	
12:30	1222	"	"	70	745	10 1/2	
1	1219	"	"	70	815	11	Out

9th Easter Selection

Fact 1 1/2 hr. because of faulty resistance carbons. Added all together, 2 3/4 hr. Out at 4:00

Epper #10

Time	Sp Gr	Temp	Volt	Amps	Total	Hrs.	Remarks
5	1228	130	8	75	120		Making working
6	1223	"	8	75	195	1	female.
7	"	"	"	75	270	2	#5269-C-1.
8	"	"	"	50	320	3	Had 120 Amps plus [illegible]
9	"	125	10	50	370	4	lopping, then failed
10	"	130	"	75	445	5	
11	"	"	"	75	520	6	
12	"	"	"	75	595	7	#58 in Epper was
1	"	"	"	75	670	8	in faced on this
2	"	"	"	75	745	9	mould.
3	"	"	"	75	820	10	Out
4						11	

10th Easter Selection

Epper #109

Time	Sp Gr	Temp	Volt	Amps	Total	Hrs	Remarks.
5	1228	130	8	75	130		Making
6	1223	"	"	75	205	1	Master female
7	"	"	"	75	280	2	#3995 A
8	"	"	"	50	330	3	Had 130 Amps plus
9	"	125	11.0.	50	380	4	plate copper, then
10	"	130	"	75	455	5	first plated
11	"	"	"	75	530	6	
12	"	"	"	75	605	7	
1	"	"	"	75	680	8	was in faced reg both
2	"	"	"	75	755	9	
3	"	"	"	75	830	10	Out
4						11	

#11 Easter Selection

(149A)

March 4, 21 — Eyper #111

Time	Spgr.	Temp	Volt	Amps	Total	Hrs.	Remarks
330	1220	130	8	—	150		Working mould
430	"	"	"	75	225	1	3733 O_2
530	"	"	"	75	300	2	had 150 amps
630	"	"	"	75	375	3	slow plate, then
730	"	"	"	75	450	4	backed up with
830	"	"	"	75	525	5	9 hrs fast plate
930	1223	"	"	75	600	6	
1030	"	"	"	75	675	7	
1130	"	"	"	75	750	8	
1230	"	"	"	75	825	9	Out

12th Eastern Selection

March 4, 21 — Eyper # 111

Time	Spgr.	Temp	Volt	Amps	Total	Hrs.	Remarks
30	1220	130	8	275			Working mould
430	"	"	"	75	325	1	4433 O_2
530	"	"	"	75	400	2	Had 275 amps slow
630	"	"	"	75	475	3	plating, then backed
730	"	"	"	75	550	4	up with 7½ hrs
830	"	"	"	75	625	5	fast plate 5h
930	1223	"	"	75	700	6	
1030	"	"	"	75	775	7	
11 (AM)	"	"	"	75	850	7½	Out

13th Eastern Selection

March 5, 21.

Exper. # 11

Time	Sp. g.	Temp	Volt	Amps	Total	Hrs.	Remarks
11 30 P.M.	1223	130	8	75	75		Making Master female
12 30	1224	"	"	75	150	1	#4336-B
1 30	"	"	"	75	225	2	Had 75 amps
2 30	1223	"	"	75	300	3	slow plating —
3 30	"	"	"	75	375	4	then backed amps
4 30	"	"	"	75	450	5	with 10 hrs. fast
5 30	"	"	"	75	525	6	plating.
6 30	"	"	"	75	600	7	
7 30	—	—	—	75	675	8	
8 30	1220	130	8	75	750	9	
9 30	"	"	"	75	825	10	Out

14th Easter Selection

March 5, 21.

Exper. #113

Time	Sp. g.	Temp	Volt	Amps	Total	Hrs.	Remarks
11 A.M.	1224	130	8	75	85		Making working master.
2	1223	"	"	"	160	1	#4433C-1
3	"	"	"	"	230	2	Had 85 amps
4	"	"	"	"	305	3	slow plating
5	"	"	"	"	380	4	— then backed
6	"	"	"	"	455	5	amps with 10 hrs.
7	"	"	"	"	530	6	fast plating
8	—	—	—	"	605	7	
9	1220	130	8	"	680	8	
10	"	"	"	"	755	9	
11	"	"	"	"	830	10	Out

15 Easter Selection

Experiment on a Core

Exper. # 114

Time	Sp.gr.	Temp.	Volt	Amps	Total	Hrs.	Remarks.
2:30	1220	78	4½	1			Plating pro[illegible] core — coated
3:30	1220	78	4½	2	[illegible]	1	with a thin layer
4:30	1220	78	4½	2	3[illegible]	2	of varnish and
							then with graphite
							by Field Cat.
							special [illegible]
							[illegible], with a
							copper plate [illegible]
							-wire anode
							chamber holding
							a few shot, with
							jar in [illegible]
							Plating [illegible]
							from tip down.
							At end of 2½ hrs.
							core was observed
							blister had formed
							under graphite —
							graphite peeled off
							easily because of
							blister.

acid 14 hrs.

March 8/21

Exper. # 115

Min.	Sp.gr.	Temp.	Volt	Amps.	Total	Hrs.	Remarks.
0:45	1223	130	8	75	140		Making a
1:45	1230	130	8	75	215	1	working mould
2:45	1230	130	8	75	290	2	#3995-A-1
3:45	1223	130	8	75	365	3	Had 140 amps.
4:45	1223	130	8	75	440	4	of copper plating
5:45	1223	130	8	75	515	5	from backing up
6:45	1223	130	8	75	590	6	with 9 hrs. past
7:45	1223	130	8	75	665	7	plating.
8:45	1223	130	8	75	740	8	
9:45	1223	130	8	75	835	9	Cut.

16 Easter Selection

acid blue.

March 9th

Expert # 116
Remarks.

Time	Gap.	Temp.	Volt	Amp.	Total	Hrs.	Remarks
10 AM	1202	130	8	75	150		Looking Good
11	1210	130	8	75	225	1	# 3995 B 4
12	1213	130	8	75	300	2	Had 150 amps
1 PM	1218	130	8	75	375	3	slow plating -
2	1224	130	8	75	450	4	then backed up
3	"	"	"	"	525	5	fast plating for
4	"	"	"	"	600	6	8 3/4 hrs.
5	"	"	"	"	675	7	
6	"	"	"	"	750	8	
6:45	"	"	"	"	825	8 3/4	Out.

17 Easter Solution

March 9th

Expert # 117
Remarks

Time	Gap.	Temp.	Volt	Amp.	Total	Hrs.	Remarks
1:30 P.M.	1210	130	8	20			Looking Good
2	1213	130	8	75	10	1/2	# 5269 B-1
1 PM	1218	130	8	75	85	1 1/2	
2	1224	130	8	75	160	2 1/2	
3	"	130	8	75	235	3 1/2	
4	"	"	"	"	310	4 1/2	
5	"	"	"	"	385	5 1/2	
6	"	"	"	"	460	6 1/2	
7	"	"	"	"	535	7 1/2	
8	"	"	"	"	610	8 1/2	
9	"	"	"	"	685	9 1/2	
10	"	"	"	"	760	10 1/2	
10:30	"	"	"	"	835	11	

18 Easter Solution

March 9th Exper. # 118

Time	Sp.gr.	Temp	Volt	Amp	Total	Hrs.	Making working mould
9 PM	1225	130	8	20			
9:30	1225	130	8	50	10	1/2	# 4336 C-1
10:30	"	"	"	"	60	1 1/2	
11:30	"	"	"	"	110	2 1/2	
12:30	"	"	"	"	160	3 1/2	
1:30 AM	"	"	"	"	210	4 1/2	
2:30	"	"	"	"	260	5 1/2	
3:30	"	"	"	"	310	6 1/2	
4:30	"	"	"	"	360	7 1/2	
5:30	"	"	"	"	410	8 1/2	
6:30	"	"	"	"	460	9 1/2	
7:30	"	"	"	40	500	10 1/2	
8:30	"	"	"	40	540	11 1/2	
9:30	"	"	"	75	615	12 1/2	
10:30	"	"	"	"	690	13 1/2	
11:30	"	"	"	"	765	14 1/2	
12:30	"	"	"	"	840	15 1/2	

19th Exter Supplement

March 9 Exper. # 119

Time	Sp.gr.	Temp	Volt	Amp	Total	Hrs.	Making working mould
PM	1225	130	8	20			
9:30	"	"	"	50	10	1/2	# 3995 A-1
10:30	"	"	"	"	60	1 1/2	
11:30	"	"	"	"	110	2 1/2	
12:30	"	"	"	"	160	3 1/2	
1:30 AM	"	"	"	"	210	4 1/2	
2:30	"	"	"	"	260	5 1/2	
3:30	"	"	"	"	310	6 1/2	
4:30	"	"	"	"	360	7 1/2	
5:30	"	"	"	"	410	8 1/2	
6:30	"	"	"	"	460	9 1/2	
7:30	"	"	"	"	510	10 1/2	
8:30	"	"	"	"	560	11 1/2	
9:30	"	"	"	"	610	12 1/2	
10:30	"	"	"	75	685	13 1/2	
11:30	"	"	"	"	760	14 1/2	

20th Exter Supplement

A

(a)

March 10, 21. Exper. # 120

Time	Sp. gr.	Temp.	Volt	Amps	Total	Hrs.	Remarks
230					175 Pente		Working Mould
330	1228	130	9	75	250	1	Backed up with
430	1225	"	"	75	325	2	175 Amps slow pl
530	1225	"	"	75	400	3	then transfer to fa
630	"	"	"	75	475	4	plating to 797 Am
730	"	"	"	75	550	5	# 7747 B1
830	"	"	"	75	625	6	Working Mould.
930	"	"	"	75	700	7	
1030	"	"	"	75	775	8	
1100	"	"	"	37	802	9	Out

21st Easter

March 11, 21 Exper. # 121

Time	Sp. gr.	Temp.	Volt	Amps	Total	Hrs.	Remarks
1	1225	134	8	65	100		Working Mould
2	"	"	"	65	165	1	# 5269 A1
3	"	"	"	65	230	2	
4	"	"	"	65	295	3	Had 100 amps
5	"	"	"	55	360	4	slow plate line
6	"	"	"	55	415	5	
7	"	"	"	55	470	6	
8	"	"	"	55	525	7	
9	"	"	"	55	580	8	
10	"	"	"	70	650	9	
11	"	"	"	75	725	10	
12	"	"	"	75	800	11	

22nd Easter

Mar. 11, 21: Exper. #12

Time	Sp. gr.	Temp	Volt	Amps	Total	Hrs.	Remarks
11	1225	134	8	50	130		Working mould
12	"	"	"	50	180	1	#7049 C 1
1	"	"	"	50	230	2	
2	"	"	"	50	280	3	Had 130 amps
3	"	"	"	50	330	4	slow plate
4	"	"	"	50	380	5	
5	"	"	"	50	430	6	
6	"	"	"	50	480	7	
7	"	"	"	50	530	8	
8	"	"	"	70	580	9	
9	"	"	"	75	650	10	
10	"	"	"	75	725	11	
11	"	"	"	75	800	12	

23rd Easter Selection

Mar. 11, 21 Exper. #23

Time	Sp. gr.	Temp	Volt	Amps	Total	Hrs.	Remarks
11	1225	130	9	75	200		Working mould
12				75	275	1	#7734 A 2
1				75	350	2	
2				75	425	3	Had 200 amps
3				75	500	4	slow plating,
4				75	575	5	then backed off
5				75	650	6	up fast plate
6				75	725	7	to 800 amps
6:30				40	765	7½	total
							Out

24th Easter Selection

Mar. 11, 21 — Exper. #12

Time	Sp. gr.	Temp	Volt	Amps.	Total	Hrs.	Remarks
11	1225	130	9	75	235		Master female
12				75	310	1	#7749 B
1				75	385	2	
2				75	460	3	Had 235 Amps
3				75	535	4	slow plating the
4				75	610	5	backed up to
5				75	685	6	797 total Amps
6				75	760	7	
6:30				37	797	7½	Out

25th Easter Selection

March 12, 21 — Exper. #125

Time	Sp. gr.	Temp.	Volt	Amps	Total	Hrs.	Remarks
10	1224	132	10.	65	65		Making Mold
11	"	"	"	60	125	1	#7736 C1
12	"	"	"	60	185	2	
1	1222	130	8	60	245	3	Had 65 Amps
2	1226	"	"	75	320	4	slow plating
3	1230	"	"	75	395	5	then backed up
4	1229	"	8½	75	470	6	to 807 fast
5	1230	"	9	75	545	7	plated.
6	1232	"	10	75	620	8	
7	1229	"	10½	75	695	9	
8				75	770	10	
8:30 AM				37	807	11	Out

26th Easter Selection

March 12, 21 Eyper 126

Time	Spg	Temp	Volt	Amps	Total	Hrs	Remarks
6 P.M.	1224	132	10	60	225		Working World
7	"	"	"	60	285	1	#3905 #1
8	"	"	"	60	345	2	
9	1222	130	8	60	405	3	Had 225 amps
10	1226	"	"	60	465	4	slow plating,
11	1230	"	"	60	525	5	then backed up
12	1229	"	8½	60	585	6	825 amps.
1	1230	"	9	60	645	7	
2	1232	"	10	60	705	8	
3	1229	"	10½	60	765	9	
4				60	825	10	Out

27th Easter Selection

March 12 Eyper #127

Time	Spg	Temp	Volt	Amps	Total	Hrs.	Remarks
11:15 A.M.	1230	135	9	80	90		working working
12:15	1232	132	10	80	170	1	worked.
1:15	1230	130	"	70	250	2	#7734 C-2
2:15	--	-	-	65	320	3	Had 90 amps.
3:15	-	-	-	65	385	4	slow plating,
4:15				65	450	5	then backed up
5:15				60	510	6	with 698 fast
6:15				60	570	7	plating.
7:15				60	630	8	
8:15				60	690	9	
9:15				60	750	10	
9:45				30	780	10½	Out

28th Easter Selection

(167)

March 12 — Exper. # 128

Time	Spgr.	Temp.	Volt	Amps	Total	Hrs.	Remarks
4:45 AM	1230	135	9	75	175		making working mould
5:45	1232	133	10	75	250	1	# 4336C-1
6:45	1228	130	"	60	325	2	Had 175 amps
7:45	-	-	-	60	385	3	slow plating.
8:45	1235	132	10	60	445	4	Backed up
9:45	1225	130	"	60	505	5	with 675 [illegible]
10:45				75	565	6	plating
11:45				75	640	7	
12:45				75	715	8	
2:45				75	790	9	Out

29th mould

March 14th — Issued 13 hrs. — Exper. # 129

Time	Spgr.	Temp.	Volt	Amps	Total	Hrs.	Remarks.
12:00	1233	130	7	75	110		making
1 PM	1230	"	7½	75	185	1	working mould
2	1235	"	7	75	260	2	Had 110 amps,
3	"	"	"	75	335	3	slow plating.
4	1233	"	"	75	410	4	Then backed
5	"	"	"	75	485	5	up with 700
6	"	"	"	75	560	6	fast plating.
7	"	"	"	75	635	7	# 4336 B-1
8	"	"	"	75	710	8	
9	"	"	"	75	785	9	
9:30					860		Out

30th Mould

C1643

No acid 13 hrs.

March 14th

Exper. # 13

Time	Sp. gr.	Temp.	Volt	Amp.	Total	Hrs.	Remarks.
12	1223	130	7	75	300		Making
1 PM	1230	"	7½	75	375	1	Master form
2	1235	"	7	75	450	2	Had 300 amps
3	"	"	7	75	525	3	slow plating.
4	1233	"	"	75	600	4	Then backed up
5	"	"	"	75	675	5	with 500 amps
6	"	"	"	75	750	6	fast plating
6:30	"				825		# 7747-A
							Quit

31st mould

No acid for 5 hrs.

March 15th

Exper. # 131

Time	Sp. gr.	Temp.	Volt	Amp.	Total	Hrs.	Remarks.
9:15 AM	1225	130	7½		100		Making working
10:15	1232	"	"	75	175	1	mould
11:15	1234	"	"	75	250	2	# 7747B-1
12:15	1232	"	"	75	325	3	Had 100 amps.
2:15	1230	"	"	75	400	4	slow plating,
3:15	"	"	"	75	475	5	Then 700 amps.
4:15	"	"	"	75	550	6	fast plating
5:15	"	"	"	75	625	7	
6:15	"	"	"	75	700	8	
7:15	"	"	"	75	775	9	
8:15	"	"	"	75	850	10	Quit

32nd mould.

120 acid for 5 hr.

March 15th — Experiment #13

Time A.M.	Sp. gr.	Temp.	Volt	Amp.	Total	Hrs	Remarks.
10:30	1225	130	7½		120		Making wire
11:30	1232	"	"	75	195	1	mould,
12:30	1234	"	"	75	270	2	#6250 F.1.
1:30	1232	"	"	75	345	3	Had 120 amp
2:30	1230	"	"	75	420	4	slow plating.
3:30	"	"	"	75	495	5	Then 680 for
4:30	"	"	"	75	570	6	plating
5:30	"	"	"	75	645	7	
6:30	"	"	"	75	720	8	
7:30	"	"	"	75	795	9	
8:15	"	"	"	54	849	9¾	Out

33rd mould

March 16, 21. — Experiment #133

Time	Sp. Gr.	Temp	Volt	amp	Total	Hrs	Remarks
10	1225	132	8	65			Working mould
30				65	65	1	reg. ni plate + 1 hr
30				"	130	2	at low amps
30				"	195	3	backed up with
30				"	260	4	787
30				"	325	5	#6391 B1 mould
30				"	390	6	
30				"	455	7	
30				"	520	8	
30				"	585	9	
30				"	650	10	
30				75	725	11	
130				75	800	12	Out

34th mould

March 16, 21 — Epper #134

Time	Sp. Gr.	Temp	Volt	Amps	Total	Hrs	Remarks
1030	1231	130	7.5	5	5		Working mould
1130	1230	"	7½	75	80	1	#4002 B3
1230	"	"	"	75	155	2	Flash copper reg
1 30	"	"	"	75	230	3	and back up for
230	"	"	"	75	305	4	792 Amps for
3 30	"	"	"	75	380	5	plating.
4 30	"	"	"	75	455	6	
5 30	"	"	"	75	535	7	
6 30	"	"	"	75	610	8	
7 30	"	"	"	75	685	9	
8 30	"	"	"	75	760	10	
9 PM	"	"	"	37	797	10½	Cut

35th mould.

March 16, 21 — Epper #135

Time	Sp. Gr.	Temp	Volt	Amps	Total	Hrs	Remarks
12 AM	1230	130	7½	5	5		Working mould
1	"	"	"	75	80	1	#4002 B1
2	"	"	"	75	155	2	Flash copper reg
3	"	"	"	75	230	3	baths then back
4	"	"	"	75	305	4	up for plating
5	"	"	"	75	380	5	with 792 Amps.
6	"	"	"	75	455	6	
7	"	"	"	75	530	7	
8	"	"	"	75	605	8	
9	"	"	"	75	680	9	
10	"	"	"	75	755	10	Cut
11				75	830	11	

36th mould.

March 16th Copper. # 136

Time	Sp.gr.	Temp	Volt	Amp.	Total	Hrs.	Remarks.
8:30 PM	1235	130	7½				Special for
9:00	"	"	"	10	10	½	Kesakore. Slow
10				50	60	1½	plating in
11				50	110	2½	nickel. Then
12				50	160	3½	backed up with
1 AM				50	210	4½	Copper fast
2				50	260	5½	plating.
3				50	310	6½	
4				50	360	7½	
5				50	410	8½	
6				50	460	9½	
7				50	510	10½	
8				50	560	11½	
8:30				25	585	12	
9:30				75	660		
10:30				75	735		Out
11:30				75	810		

37th Mould

March 16th Copper. # 137

Time	Sp.gr.	Temp	Volt	Amp	Total	Hrs.	Remarks.
8:15 PM	1230	130	7½		5		Making
9:15				50	55	1	working mould # 38136-1
10:15				50	110	2	Had copper
11:15 AM				50	160	3	flash, Then
12:15				50	210	4	backed up
1:15				50	260	5	with fast
2:15				50	310	6	plating.
3:15				50	360	7	
4:15				50	410	8	
5:15				50	460	9	
6:15				50	510	10	
7:15				75	585		
8:15				75	660		
9:15				75	735		Out
10:45				~~37~~	810		

38th mould

March 17, 21. Copper # 138

Time	Spider	Temp	Volt	Amp	Total	Hrs	Remarks.
11 AM	1230	133	9	75	5		Working Mould
12				75	80	1	# 4386 C2
1				75	155	2	flash copper 1-hr
2				75	230	3	5 amp in reg bath
3				75	305	4	then back up
4				75	380	5	with 750 amp
5				75	455	6	fast plating
6				75	530	7	
7				75	605	8	
8				75	680	9	
9				75	755	10	Out.

39th mould

March 17, 21. Copper # 139

Time	Spider	Temp	Volt	Amp	Total	Hrs	Remarks
2 noon	1230	130	9	75	5		Working Mould
1				75	80	1	#6250 F1
2				75	155	2	flash copper 1-hr
3					230	3	at 5 amp in reg.
4					305	4	baths, then backed
5					380	5	up with 750 amp.
6					455	6	fast plating
7					530	7	
8					605	8	
9					680	9	
10					755	10	Out

40th Mould.

March 18, 21 — Exper # 140

Time	Sp Gr	Temp	Volt	Amp	Total	Hrs	Remarks
9:30	1235	130	7.5	50	5		Working Female
10:30				50	55	1	#7747 A
11:30				50	105	2	1 hr at 5 amps slow
12:30				50	155	3	copper plate, then
1:30				50	205	4	back up with 7
2:30				50	255	5	amps for flat plating
3:30				50	305	6	
4:30				50	355	7	
5:30				50	405	8	
6:30				50	455	9	
7:30				50	505	10	
8:30						11	
9:30						12	

41st mould

March 18 21 — Exper # 141

Time	Sp Gr	Temp	Volt	Amp	Total	Hrs	Remarks
10	1235	130	7.5	50	175		Working Mould
11				50	225	1	#6252 FG
12				50	275	2	Had 175 amps
1				50	325	3	slow plating
2				50	375	4	then back up to
3				50	425	5	total 75 amps for
4				50	475	6	plating.
5				50	525	7	
6				50	575	8	
7				50	625	9	
8				50	675	10	
9					750	11	
9:30				37	787	12	Out.

42nd mould

Mar. 18th — Exper. # 14

Time	Sp. gr.	Temp	Volt	Amp.	Total	Hrs	Remarks.
4:30 P.M.	1230	130	9	5	5		Making
5:30	"	"	"	75	80	1	working normally
6:30	"	"	"	75	155	2	# 4002 B-1
7:30	"	"	"	75	230	3	Out at 9:15 P.M.
8:30	"	"	"	75	305	4	
9:15	"	"	"	55	360	4 3/4	
March 19 1 P.M.							
2 PM				75	435		
3 PM				75	510		
4 PM				75	585		
5 PM				75	660		
6				75	735		
7				75	810		

4/3/19

March 18th — Exper. # 143

Time	Sp. gr.	Temp.	Volt	Amp.	Total	Hrs.	Remarks
11:30 A.M.	1230	130	9	5	5		Making working normally
12:30	"	"	"	75	80	1	# 4002 A-3
1:30	"	"	"	75	155	2	Out at 9:15 P.M.
2:30	"	"	"	75	230	3	
3:30	"	"	"	75	305	4	
4:15	"	"	"	55	360	4 3/4	
March 19 11 A.M.	1235	130	9				
12				75	435	5 3/4	
1 PM				75	510		
2				75	585		
3				75	660		
4				75	735		
5				75	810		

2/6/19

(183)

March 18th Exper. # 145

Time p.m.	Sp.gr.	Temp.	Volt	Amp.	Total	Hrs.	Remarks
10:15	1230	130	9		5		Making working
11:15				50	55	1	mould.
12:15				50	105	2	#3995 A1
1:15				50	155	3	
2:15				50	205	4	
3:15				50	255	5	
4:15				50	305	6	
5:15				50	355	7	
6:15				50	405	8	
7:15				50	455	9	
8:15				50	505	10	
8:30				15	520	11	
9:30				75	595	12	
10:30				75	670	13	
11:30				75	745	14	
				45	14		

March 18th Exper. # 145

Time p.m.	Sp.gr.	Temp.	Volt	Amp.	Total	Hrs.	Remarks
15	1230	130	9		60		Making working
15				50	110	1	female
15				50	160	2	# 4002 B
15				50	210	3	Had 4 hrs. in
15				50	260	4	plus copper.
15				50	310	5	
15				50	360	6	
15				50	410	7	
15				50	460	8	
15				50	510	9	
15				50	560	10	
30				15	575	11	
30				75	650	12	
30				75	725	13	
00				37	762		Out
				46		14	

C185

Mar. 21st — Exp. #1

Time A.M.	Sp.gr.	Temp	Volt	Amps	Total	Hrs.	Remarks.
11	1232	130	8		5		#4336B-1
12	"	"	"	75	80	1	Making working
1 PM	"	"	"	75	155	2	mould.
2	"	"	"	75	230	3	
3	"	"	"	75	305	4	
4	"	"	"	75	380	5	
5	"	"	"	75	455	6	
6	"	"	"	75	530	7	
7	"	"	"	75	605	8	
8	"	"	"	75	680	9	
9	"	"	"	75	755	10	Out

475

Mar. 21st — Exp. #147

Time	Sp.gr.	Temp	Volt	Amps	Total	Hrs	Remarks.
1:45	1227	135	6		285		#7734C4
1:45				50	335	1	making
1:45				50	385	2	working mould
1:45				50	435	3	Had 285
1:45				50	485	4	amps. slow
1:45				50	535	5	plating.
1:45				50	585	6	
1:45				50	635	7	
1:45				50	685	8	
1:45				50	735	9	
1:45				50	785	10	
1:30				37	822	11	Out.

48 45

Mar. 21st Equip. # 148

Time	Sgl.	Temp	Volt	Amp	Total	Hrs	Remarks.
9:45	1227	135	6		285		#3813 C-
10:45				50	335	1	making
11:45				50	385	2	working more
12:45				50	435	3	Had 285 amp
1:45				50	485	4	slow plating
2:45				50	535	5	
3:45				50	585	6	
4:45				50	635	7	
5:45				50	685	8	
6:45				50	735	9	
7:45				50	785	10	
8:30				37	822	11	Out.

49 lb

Mar. 22 Equip # 149

Time	Sgl.	Temp	Volt	Amp	Total	Hrs.	Remarks.
	1240	130	6 ½		140		#238983
1	1235	"	"	75	215	1	making working
2	1230	"	"	75	290	2	curved
3	"	"	"	75	365	3	Had 140 amps
4	"	"	"	75	440	4	slow plate.
5	"	"	"	75	515	5	
6	"	"	"	75	590	6	
7	"	"	"	75	665	7	
8	"	"	"	75	740	8	
9	"	"	"	75	795	9	Out

50 lb

Mar. 22 Expm. # 150

Time AM	Sp. g.	Temp.	Volt	Amp.	Total	Hrs.	Remarks.
10	1240	130	6½		140		# 6252 C-4
11	1235	"	"	75	215	1	Marking working
12	1230	"	"	75	290	2	moved Had
1	"	"	"	75	365	3	140 Amps. slow
2	"	"	"	75	440	4	plate.
3	"	"	"	75	515	5	
4	"	"	"	75	590	6	
5	"	"	"	75	665	7	
6	"	"	"	75	740	8	
7	"	"	"	75	795	9	Cut

51 sd

Mar. 22 Expm. # 151

Time PM	Sp. g.	Temp.	Volt	Amp.	Total	Hrs.	Remarks
30	1230	130	8		240		# 6250 F1
30	"	"	"	40	280	1	marking
30	"	"	"	40	320	2	working moved
30	"	"	"	40	360	3	Had 240 amps
30	"	"	"	40	400	4	slow plate
30	"	"	"	40	440	5	
30				40	480	6	
30				40	520	7	
30				40	560	8	
30				40	600	9	
30				40	640	10	
30				40	680	11	
30				40	720	12	
30				40	760	13	
30				40	800	14	Cut

52 sd

(141)

Mar. 22 — Exp. # 152

Time P.M.	Sp. G.	Jug	Volt	Temp	Total	Hrs.	Remarks.
7:30	1230	130	8		240		#7734A4
8:30	"	"	"	40	280	1	making working
9:30	"	"	"	40	320	2	removed, 1 hr
10:30	"	"	"	40	360	3	240 amps. slow
11:30	"	"	"	"	400	4	plate.
12:30	"	"	"	"	440	5	
1:30				"	480	6	
2:30				"	520	7	
3:30				"	560	8	
4:30				"	600	9	
5:30				"	640	10	
6:30				"	680	11	
7:30				"	720	12	
8:30				"	760	13	
9:30				"	800	14	Out

53 Hrs

Mar. 23 — Exp. 153

Time A.M.	Sp. G.	Jug	Volt	Temp. Amp	Total	Hrs.	Remarks.
9:30	1240	130	9		180		#238982
10:30	1230	"	"	75	255	1	making working
11:30	"	"	"	75	330	2	removed
12:30	"	"	"	75	405	3	Had 180 amp
1:30	"	"	"	75	480	4	slow plate
2:30	"	"	"	75	555	5	
3:30	"	"	"	75	630	6	
4:30	"	"	"	75	705	7	
5:30	"	"	"	75	780	8	
7:00	"	"	"	38	818	8½	Out

54 Hrs

C1937

Mar. 23 — Equip. #15

Time	Sig.	Trip	Volt	Amp	Joules	Hrs	Remarks.
10:30	12:30	1:30	9		180		#7735A1
11:30	12:30	"	"	75	255	1	walking work
12:30	"	"	"	75	330	2	recorded
1:30	"	"	"	75	405	3	Had 180
2:30	"	"	"	75	480	4	
3:30	"	"	"	75	555	5	
4:30	"	"	"	75	630	6	
5:30	"	"	"	75	705	7	
6:30	"	"	"	75	780	8	
7:00	"	"	"	38	818	8½	Cut

55 Ch

Mar. 23 — Equip. #15

Time P.M.	Sig.	Trip	Volt	Amp	Joules	Hrs	Remarks. #7794B1
1:30	12:30	1:30	8		270		walking
1:30				40	310	1	working work
1:30				40	350	2	1 for 270
1:30				40	390	3	amps slowly
1:30				40	430	4	
1:30				40	470	5	
1:30				40	510	6	
1:30				40	550	7	
1:30				40	590	8	
1:30				40	630	9	
1:30				40	670	10	
1:30				40	710	11	
1:30				40	750	12	
1:30				40	790	13	
1:30				40	830	14	Cut,

56 Ch

Mar. 23 Exper. # 156

Time	Spgr.	Temp.	Volt	Amp.	Total	Hrs.	Remarks. # 6252 A1
7:30	1230	130	8		240		working
8:30				40	280	1	working more
9:30				40	320	2	Had 240 amps
10:30				40	360	3	slow plate
11:30				40	400	4	
12:30				40	440	5	
1:30				40	480	6	
2:30				40	520	7	
3:30				40	560	8	
4:30				40	600	9	
5:30				40	640	10	
6:30				40	680	11	
7:30				40	720	12	
8:30				40	760	13	
9:30				40	800	14	Out

57 Ah

Mar. 24 Exper. # 157

Time	Spgr.	Temp.	Volt	Amp.	Total	Hrs.	Remarks. # 6250 F1
2 PM 130	1240	127	5		100		working
				40			working
			10:30 AM				more
AM 130					780	17½	Had 100 amps
							slow plate

57 Ah

~~Data of disc~~ Rev. 48 R.P.M.

March 25, 21. Exper. # 15

Time	Sp.gr.	Temp.	Volt	Amps	Total	Hrs	Remarks
2.30 P.M.	1228	132	8	220	220		Master Mould
3.30	1220	130	"	75	295	1	* E-540 whi
4.30	"	"	"	75	360	2	has had prelim
5.30	"	"	"	75	435	3	then back up to
6.30	1222	"	"	75	510	4	total of 220 Am
7.30	1225	"	"	75	585	5	in slow plating
8.30	"	"	"	75	660	6	baths, backed
9.30	"	"	"	75	735	7	in regular pro
10.30	"	"	"	75	810	8	fast plating bat
11.30	1222	"	"	75	885	9	for 15 hours
12.30	1221	"	"	75	960	10	making a total
1.30	1222	"	"	75	1035	11	of 1345 Amps
2.30	1220	"	"	75	1110	12	
3.30	"	"	"	75	1185	13	10 cc Acid each h
4.30	"	"	"	75	1260	14	500 cc H.2O " "
5.30					1335	15	4 hours.

Set revolve till disc was same temp. as sol. was covered in preliminary baths then backed up in regular baths to total of 220 Amps. Put in fast plating bath then plate 75 amps for 15 hours. After 4 hrs disc started to warp " 8 " small nubs appeared " 12 " face " 1/16" all over

at 5.30 P.M. Looked at it and it started to [illegible] increased rate [illegible] 1000 c.c. per h. [illegible] 11:30 — at 2 [illegible] disc was very rough — large tree formation removed.

Mar. 29

Exper. # 159

Time	Sp.gr.	Temp.	Volt	Amp.	Total	Hrs.	Remarks.
1.30 P.M.	1225	130	8		225		#7747 A3
1.30	"	"	"	75	300	1	making working
2.30	"	"	"	75	375	2	mould Half
3.30				75	450	3	225 Amps. slow
4.30				75	525	4	plate. When
5.30				75	600	5	taken out of
6.30 A.M.	1234	130	8	50	650	6	slow plate - mould
7.30				50	700	7	had rough center
				50	750	8	also whole
							surface showed
							slight roughness
							159

594

[1993]

Mar. 29 Exper. # 160

Time	Sp. gr.	Temp.	Volt	Amp.	Total	Hrs.	Remarks.
P.M. 12:30	1225	130	8		210		#7683 C-1
1:30	"	"	"	75	285	1	working wonder
2:30	"	"	"	75	360	2	moved. Hard
3:30				75	435	3	210 Amp. slow
4:30				75	510	4	plate. When
5:30				75	585	5	taken from
A.M. 10:30	1234	130	8	50	630	6	slow plate
11:30				50	680	7	would show
12:30				50	730	8	roughness on
							music area
							#163
			~~5~~ 6				

60 th

50
.3
15°

$\frac{50}{15}$

[ITEM(S) FOUND IN BOOK]

C1-21-M217

Eyper #77 Cu backed

Walter Archer

You better get a good female that has been pulled off because it has made working moulds enough to plate a little nickel over it in regular bath say 8 to 10 amp for six hours then put it in 75 amp bath to plate reg thick have it chipped & turned & test prints take to see if any trouble arises

[ITEM(S) FOUND IN BOOK]

Exper #51 & 52
12/27/20.

Mr. Archer:-

284.70 grams B.V. per liter
27.71 c.c. H_2SO_4 " "

Therefore add 7 oz. B.V. +
106 c.c. H_2SO_4 to 10 gallons
to make it same as Dec. 2, 1920

F. Kelley Jr

Mr. Archer:- Exper #53 Dec. 28, 1920.

Analysis:- 299.82 grams B.V. per liter.
29.84 c.c. H_2SO_4 " "

∴ add 86 c.c. H_2SO_4 to make the sol.
300 grams B.V. + 32 c.c. H_2SO_4 per
liter - (10 gallons)

F. Kelley Jr

[ITEM(S) FOUND IN BOOK]

Eyper #54

Mr. Archer - Dec. 29, 1920.

Analysis - 27.12 c.c. H_2SO_4 per liter.
270.89 grams B.V. " "

1. add 196 c.c. H_2SO_4 T
2 lbs. 10 oz. B.V. to make
10 gallons have 300 grams B.V. T 32 c.c. H_2SO_4
per liter.

Note - I add the 196 cc H_2SO_4 on any B.V.

Eyper #55

Mr. Archer Dec. 30, 1920

Analysis - 23.60 c.c. H_2SO_4 per liter.
257.74 grams B.V. " "

Therefore add 3 lbs. 12 oz. B.V. T
336 c.c. H_2SO_4 to 10 gal.
To make 32 c.c. H_2SO_4 per liter
& 300 grams B.V. " "

Eyper #55
Added half the quantity
3 lbs 10 oz B.V.
10 B.V. add
2/336
[illegible]

[ITEM(S) FOUND IN BOOK]

Mr. Archer — 56 & 57 Eq/2

Analysis :- 22.73 grams B.V. per liter
247.86 c.c. H_2SO_4 " "

Therefore add 246 c.c. H_2SO_4 T
1 lt. 90 g. B.V. T to gallon
to make 3 ½ c.c. H_2SO_4 T 300 grams
B.V. per liter

1.3 gm BV } 2 lbs 3 oz. B.V.
188 cc H_2SO_4 } 369 c.c. Acid. } To dilute for 15 gallon

22.73
17 x 2.7
6
1036.2
90 6.2
130.2
1.906
396.0

1.6
8
100
6 x 1.4
6
1.28
3
368.4
448

[ITEM(S) FOUND IN BOOK]

Expers 58 & 59

Mr. Archer - Jan. 3, 1921

Analysis - 24.00 c.c. H_2SO_4 per liter
295.22 grams B.V. " "

∴ add 480 c.c. H_2SO_4 T
14 oz. B.V. to 20 gal.
to make 300 grams T 30 c.c.
per liter.

Tilletts J.

Did not add any B.V. or H_2SO_4
want solution to taper down till it
becomes poor plating

[ITEM(S) FOUND IN BOOK]

Copper # 60 – 61
4
Jan. 4, 19–1

Analysis: 295.88 grams B.V. per liter
24.85 c.c. H_2SO_4 " "

Check Test

SO_2 1300
Ex
No

Copper 60 + 61 Jan. 4, 20.

297.19 B.V.
25.26 Acid } gravity 1210

add 379 c.c. acid
1/2 lb. B.V.
for 20 gal.
gravity 1210

Copper 60 + 61
did not add any B.V. or H_2SO_4
Want solution content to taper down
till it shows poor plating

Copper 60

45 amps short

[ITEM(S) FOUND IN BOOK]

Jan. 6, 1921

Mr. Archer

Analysis = 282.73 grains B.V. per liter
23.48 c.c. H_2SO_4 " "

#62-63 Expav.

1.209 @ 70°F
1195 @ 120°

F. Kelley Jr.

1/7/21

Analysis: 260.26 grains B.V. per liter
19.36 c.c. H_2SO_4 " "

F. Kelley Jr.

11 and 290 B.V.
Content 24 H_2SO_4
add 297 H_2SO_4
" 4 gr. B.V.

[ITEM(S) FOUND IN BOOK]

Exp per #64

Mr. Archer - Jan. 8, 1921.

Analysis :- 263.00 grams B.V. per liter.
16.75 c.c. H_2SO_4 " "

F. Dietlef Jr.

24
16.75
7.25
6
435 c.c.

290
26.5
270
6
453 | 1620 grams (3
1359
261 X 16
453
16
1566
261
453 | 4176 (9
4077
990

add 3 lbs 9 oz B.V.
435 c.c. H_2SO_4

[ITEM(S) FOUND IN BOOK]

Jan. 8, 20.

Export # 65466.

Charge: 286.67 grams B.V.

22.24 c.c. H_2SO_4

add 8 oz. B.V.T.

7.20 c.c. H_2SO_4

[ITEM(S) FOUND IN BOOK]

Mr. Archer 1/10/21

~4.56 B.V.
18.40 H_2SO_4

Check before correcting for #67 Eyfler

add ~1/2 gallon Water
+ 524 c.c. H_2SO_4
Tannin 23 acid
+ 280 B.V.

+ 148 c.c. more of acid for
25 acid

F. Kelley Jr.

Eyfler #67

Mr. Archer 1/10/21

244.56 grams B.V.T
21.14 c.c. H_2SO_4 per
liter

F. Kelley Jr.

[ITEM(S) FOUND IN BOOK]

Con Jan 10

2 1/2 gallon water
524 cc H_2SO_4 } 23 cc per lot

148 cc H_2SO_4 more to = 25 cc H_2SO_4 per liter

Jan. 11, 1941

Mr. Archer:-

Analysis

16 v. 85 grams B.V.T
14.55 c.c. H_2SO_4 per liter

add 14 lbs BV
" 497 cc H_2SO_4
added. OK. OKG.

[ITEM(S) FOUND IN BOOK]

1/13/-1

294.84 grams B.V. per liter

20.05 c.c. H_2SO_4 " "

add 200 c.c. H_2SO_4

to make 25 cc H_2SO_4 per liter Epper #71

Epper #72

1/14/-1

23.34 c.c. H_2SO_4

283.41 grams B.V.

add 80 c.c. H_2SO_4

F. Mitty Jr.

Temp.	Grms $CuSO_4$ Per 100 grms. H_2O
0	12.5 14.3
10	14.8 17.4
20	17.2 20.7
25	18.5 22.7
30	20 25
40	22.5 28.5
50	25 33.3
60	28.5 40
80	35.5 55
100	43 75.4
120	44 78.6
140	44.5 80.2
160	44 78.6
180	43 75.4

Specific Gravity of saturated sol. of $CuSO_4 \cdot 5H_2O$ in H_2O at 16

100 grms. sat. solution in H_2O contains 20.32 grms. $CuSO_4$ at 30

about 25 cc H_2O

$CuSO_4$ Solubilities

[ITEM(S) FOUND IN BOOK]

1/15/~1

Acid = 19.50 c.c. H_2SO_4
265.70 grams B.V.

Walter the new steam coil is in F.C.

Add ~ lbs ~ oz B.V.
~64 c.c. H_2SO_4.

285 BV
25 cc H_2SO_4

Epper #73

Epper #74

1/17/~1

242.27 grams B.V.
18.26 c.c. H_2SO_4.

add 3 lbs 4 oz.
296 c.c. acid = figure 11 gallons.

[ITEM(S) FOUND IN BOOK]

1/18/21.

287.43 grams B.V. per liter
24.44 c.c. H_2SO_4 " "

Expert #75

January 19, 1921

24.22 c.c. H_2SO_4 per liter
278.84 grams B.V. " "

A. Hetteß Jr.

add 1 lb B.V.

Expert #76

[ITEM(S) FOUND IN BOOK]

1/20/21

278.84 grams B.V. per liter
22.79 c.c. H_2SO_4 " "

add 110 g B.V.
97 c.c. H_2SO_4

11 gallons solution Fidelity Jr.
Exper #77

Exper #78.

1/21/21

23.34 c.c. H_2SO_4 per liter
245.13 grams B.V. " "

add 66 c.c. Acid

225 B.V 80° @ 1160
23 H_2SO_4

[ITEM(S) FOUND IN BOOK]

Jan 23, 21.

Mr Archer

Copper Solution

H_2SO_4 per liter 14.11 c.c. or 25.89 grams

$CuSO_4$ per liter 289.29 grams.

Bedford

1/24/21.

289.50 grams B.V. per liter

12.49 c.c. H_2SO_4 " "

Cold 450 c.c. H_2SO_4.

Exper #79

[ITEM(S) FOUND IN BOOK]

1/26/21

279.99 grams B.V. per liter
18.67 c.c. H_2SO_4 " "

add 253 c.c. H_2SO_4
12 oz. B.V.

F. Kelly Jr.

1/28/21

297.76 B.V. Exper# 80
22.24 H_2SO_4

add 1 liter water
to 116 c.c. H_2SO_4

~~Maybe Bomber~~

[ITEM(S) FOUND IN BOOK]

~~Copper #80~~

1/31/~1

18.12 c.c. H_2SO_4 per liter.

304.94 grams B.V. " ".

add 294 cc H_2SO_4 + 2 liters H_2O

2/1/~1 Copper #81

17.03 c.c. H_2SO_4 per liter

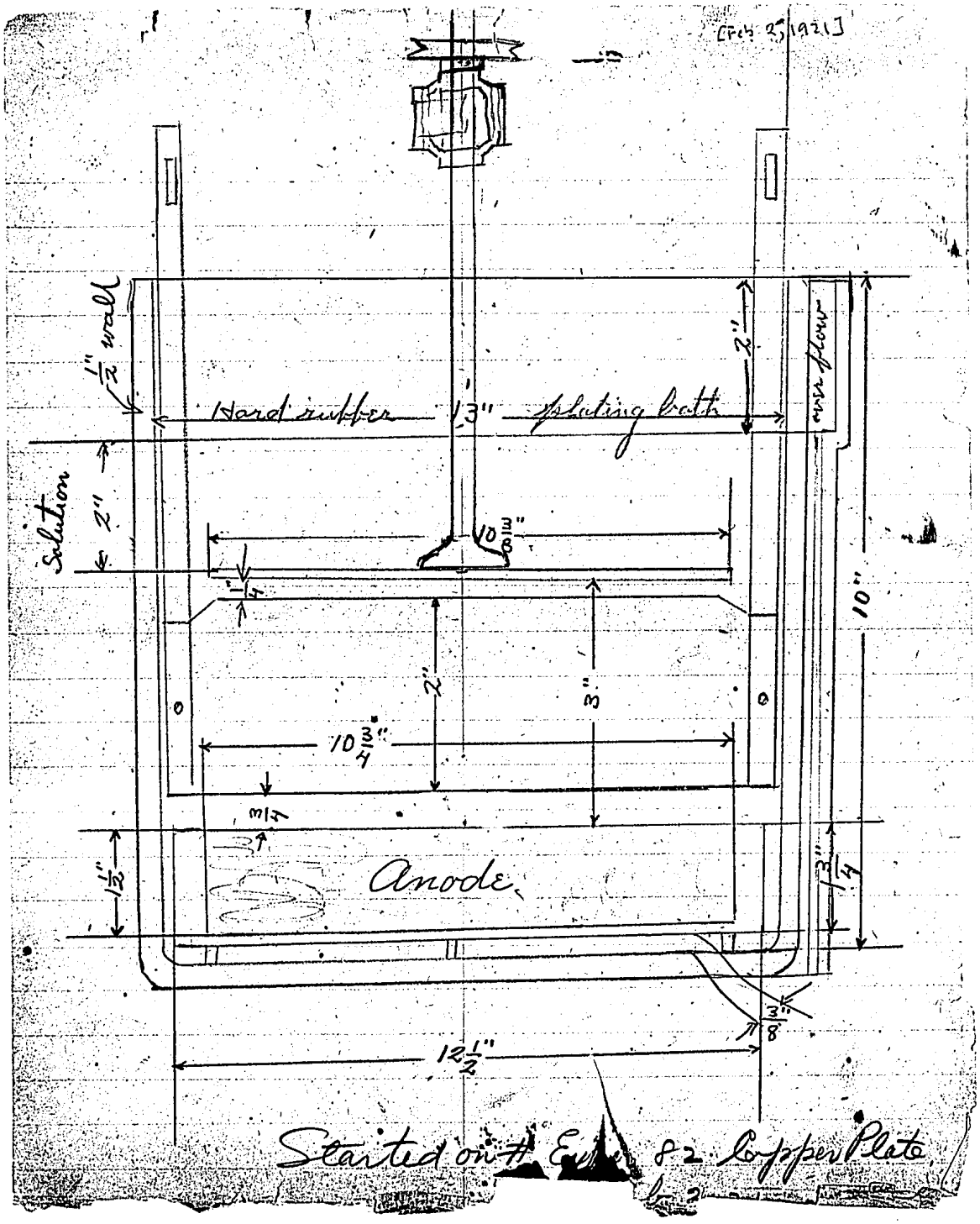
299.41 grams B.V. " ".

: add 336 c.c. H_2SO_4 T

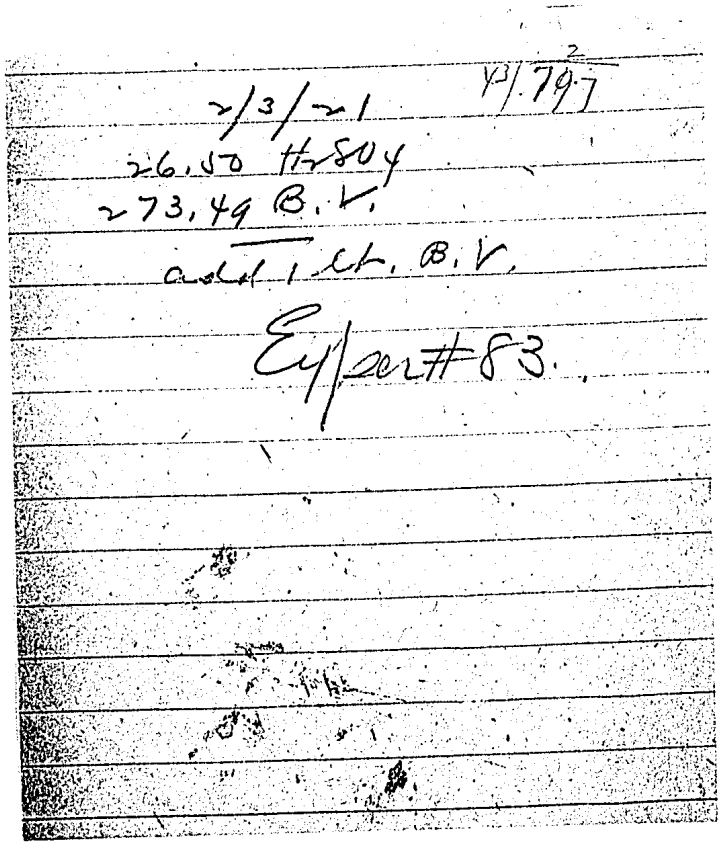
2 liters water

F. Mettel Jr.

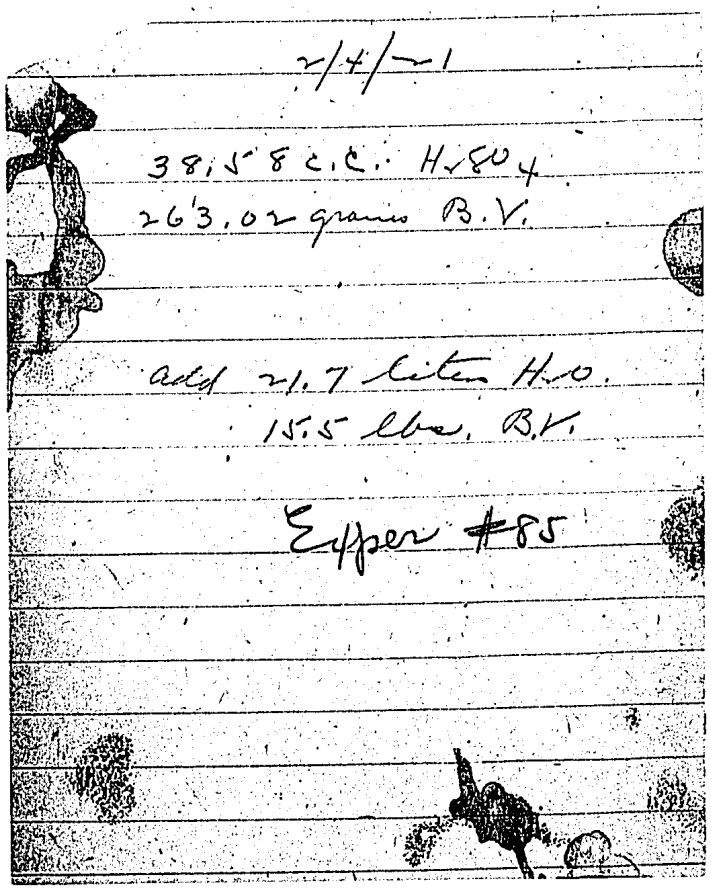
[ITEM(S) FOUND IN BOOK]



[ITEM(S) FOUND IN BOOK]



[ITEM(S) FOUND IN BOOK]



2/4/-1

38.58 c.c. H_2SO_4
263.02 grams B.V.

add 21.7 liters H_2O.
15.5 lbs. B.V.

Epper #85

[ITEM(S) FOUND IN BOOK]

2/7/21-
304.37 grams B.V. per liter
24.58 c.c. H_2SO_4 " "

F. Kettle Jr.

Eyper #86

33T-150M-5-20

MEMORANDUM
THOMAS A. EDISON INDUSTRIES

[Feb 9, 1921]

MR. Mr Archer
Analysis of copper Sol.
FUNCTION

DATE

AVOID VERBAL MESSAGES
CONFIRM VERBAL UNDERSTANDINGS

H_2SO_4 per liter 18.35 cc
Cu SO_4 " " 29.5 grams

26 cc H_2SO_4
12 gal.

Rodford.

Add 347 cc H_2SO_4 to 12 gal solution
will make it 26 cc per liter

Eyper #88

35.48

[ITEM(S) FOUND IN BOOK]

2/10/21

21.01 c.c. H_2SO_4 per liter
298.86 grams B.V. " "

add 1945 c.c. water &
210 c.c. H_2SO_4

J. Dettel Jr.

Master Female

Archer 2/10/21

290.04 grams B.V. per liter
22.65 c.c. H_2SO_4 " "

add 700 c.c. water
& 112 c.c. H_2SO_4

J. Dettel Jr.

Employee #89

[ITEM(S) FOUND IN BOOK]

2/11/21

282.87 grams B.V. per liter
22.79 c.c. H_2SO_4 " "

add 8 8 c.c. H_2SO_4

J. Little Jr.

2/12/21

23.48 c.c. H_2SO_4 per liter
278.46 grams B.V. " "

add 7 oz. B.V.
" 43 c.c. H_2SO_4

J. Little Jr.

Exhibit #92

[ITEM(S) FOUND IN BOOK]

33T-150M-5-20

MEMORAND[redacted]
THOMAS A. EDISON INDUSTRIES

[Feb 15, 1921]

MR. Mr Archer

DATE

AVOID VERBAL MESSAGES
CONFIRM VERBAL UNDERSTANDINGS

FUNCTION

Acid content 25.17 cc per liter
$CuSO_4$ " 277.12 grams per liter

Add 296 grams B.V. to make standard

295.
277.
8

38.
56
304.

3.785 liters per gallon
10 gallon
37.850
8 grams
302.800

Copper 1794

33T-150M-5-20

MEMORANDU[redacted]
THOMAS A. EDISON INDUSTRIES

DATE 2-15-21

MR. Archer

AVOID VERBAL MESSAGES
CONFIRM VERBAL UNDERSTANDINGS

FUNCTION

Copper Solution
Acid 21.45
$CuSO_4$ 278.34

Add 182 cc H_2SO_4
" 9 oz. $CuSO_4$

Redford.

Copper 1794

[ITEM(S) FOUND IN BOOK]

33T-150M-5-20

MEMORANDUM
THOMAS A. EDISON INDUSTRIES

(Feb 17, 1921)

MR. Archer

DATE

Cu Sulphate Solution

FUNCTION

AVOID VERBAL MESSAGES
CONFIRM VERBAL UNDERSTANDINGS

H_2SO_4 per liter 25.29 cc
$CuSO_4$ " 275.89

Add 21 cc H_2SO_4
" 10 oz $CuSO_4$

Hedford

33T-150M-5-20

MEMORANDUM
THOMAS A. EDISON INDUSTRIES

(Feb 18, 1921)

MR.

DATE

FUNCTION

AVOID VERBAL MESSAGES
CONFIRM VERBAL UNDERSTANDINGS

Reg Acid 27.28 $CuSO_4$ 324.94 g
Special Acid 29.26 × $CuSO_4$ 300 g

[ITEM(S) FOUND IN BOOK]

33T-150M-3-20

MEMORANDUM
THOMAS A. EDISON INDUSTRIES

[Feb 21, 1921]

MR. Archer

DATE

AVOID VERBAL MESSAGES
CONFIRM VERBAL UNDERSTANDINGS

FUNCTION

H_2SO_4 26.04 cc per liter

$CuSO_4$ 296.74 grams per liter

[illegible]

[illegible]

33T-150M-3-20

MEMORANDUM
THOMAS A. EDISON INDUSTRIES

DATE 2-23-21

MR. Archer

AVOID VERBAL MESSAGES
CONFIRM VERBAL UNDERSTANDINGS

FUNCTION

$CuSO_4$ 3.8.15 grams per liter 6.85

H_2SO_4 3.9.68 1.15 7.4

Nickel solution acetic 7.1 grams per liter

[illegible] BV Redford. 126

[illegible] H_2SO_4

3.8 together. made 300 BV

" 27 cc H_2SO_4 in place

[ITEM(S) FOUND IN BOOK]

33T-150M-5-20

MEMORANDUM
THOMAS A. EDISON INDUSTRIES

DATE

MR. Archer

AVOID VERBAL MESSAGES
CONFIRM VERBAL UNDERSTANDINGS

FUNCTION

Copper Solution H_2SO_4 — 23.64 cc
$CuSO_4$ 294.25

Nickel sol Nitric acid 5.1 cc per liter

Added to copper solution [illegible] water
+ 67 cc H_2SO_4

Added to Nickel Solution [illegible] water
acid

Rectford

33T-150M-5-20

MEMORANDUM
THOMAS A. EDISON INDUSTRIES

DATE

MR. Archer

AVOID VERBAL MESSAGES
CONFIRM VERBAL UNDERSTANDINGS

Copper solution
FUNCTION

$CuSO_4$ — 305 grams per liter
H_2SO_4 — 26.49 cc per liter

Added 3 qts water + 100 cc acid

Rectford

[ITEM(S) FOUND IN BOOK]

39T-150M-5-20

MEMORA
THOMAS A. EDISON ORIES

DATE

MR.

AVOID VERBAL MESSAGES
CONFIRM VERBAL UNDERSTANDINGS

FUNCTION

Cu SO_4 275.41 grams per liter
H_2SO_4 22.44 cc per liter

546. grams copper sulphate to make
143 cc sulphuric acid

27 BV
27 H_2SO_4

[ITEM(S) FOUND IN BOOK]

33T-150M-5-20

MEMORANDUM
THOMAS A. EDISON INDUSTRIES

MR. Archer

DATE 3/1/21

AVOID VERBAL MESSAGES
CONFIRM VERBAL UNDERSTANDINGS

FUNCTION

Copper Solution

$CuSO_4$ pure 297 [illegible]
H_2SO_4 " " 26.78

Added 1 1/2 liters water & 3 [illegible] c.c. acid

Redford

33T-150M-5-20

MEMORANDUM
THOMAS A. EDISON INDUSTRIES

MR. Archer
Copper Analysis

DATE 3/2/21

AVOID VERBAL MESSAGES
CONFIRM VERBAL UNDERSTANDINGS

FUNCTION

$CuSO_4$ — 286.59 grams / L
H_2SO_4 — 27.52 cc / L

Redford

[ITEM(S) FOUND IN BOOK]

33T-150M-5-20

MEMORANDU[redacted]
THOMAS A. EDISON INDUSTRI[redacted]

March 4. 21

MR. Archer

FUNCTION

AVOID VERBAL MESSAGES
CONFIRM VERBAL UNDERSTANDINGS

Chief 27. 28
$CuSO_4$ 283.06

Redford.

MEMORANDUM
THOMAS A. EDISON INDUSTRIES

[redacted]ch 8 21.

FUNCTION

AVOID VERBAL MESSAGES
CONFIRM VERBAL UNDERSTANDINGS

$CuSO_4$ 2 84.69 grams / L 212.25 $CuSO_4$

H_2SO_4 21. cc / L

6 1/2 liters water — 2213 grams $CuSO_4$.

Redford.

[ITEM(S) FOUND IN BOOK]

33T-150M-5-20

MEMORANDUM
THOMAS A. EDISON INDUSTRIES

[redacted]

DATE Mar 9, 21

MR.

AVOID VERBAL MESSAGES
CONFIRM VERBAL UNDERSTANDINGS

FUNCTION

H_2SO_4 — 28.58 cc per L

$CuSO_4$ 293.54 grams per L.

Redford

33T-150M-5-20

MEMORANDUM
THOMAS A. EDISON INDUSTRIES

[redacted]

DATE 3/10/21

MR. Mr Archer

AVOID VERBAL MESSAGES
CONFIRM VERBAL UNDERSTANDINGS

FUNCTION

$CuSO_4$ per liter 290.79 grams.

H_2SO_4 per liter 28.34 cc

Redford.

[ITEM(S) FOUND IN BOOK]

38T-150M-3-20

MEMO[redacted]

THOMAS A. EDISON INDUSTRIES

MR. Archer

DATE March 11/21

AVOID VERBAL MESSAGES
CONFIRM VERBAL UNDERSTANDINGS

FUNCTION

Cu #1	$CuSO_4$	per liter	335.10 grams
	H_2SO_4	per liter	34.30 cc
Cu Reg.	$CuSO_4$	per liter	296.64 grams
	H_2SO_4	per liter	29.58 cc

290 at 1200 327 at 1230
27 32

[ITEM(S) FOUND IN BOOK]

35T-150M-5-20

MEMORANDUM
THOMAS A. EDISON INDUSTRIES

MR. Archer

DATE March 14/21

AVOID VERBAL MESSAGES
CONFIRM VERBAL UNDERSTANDINGS

FUNCTION

Cu SO4 per liter 290.56 grams

H2 SO4 per liter 33.31 cc

Redford

327

38.5

	1226	3 oz			While
11	1230	3 oz	25 c.c.	1000 c.c.	running at
12	1229	3 oz	25 c.c.	1000 c.c.	60 amps
1 AM	1230	3 oz	25 c.c.	1000	two bottles of extracid to 25 c.c. + add to 3 oz. Zn
2	1232	4 oz	25 c.c.	1500	water, at 9 A.M. binder, to
3	1229	4 oz	25 c.c.	1000	get gravity to 1230
4	1230	4 oz.	30 c.c.	1000	— — — water
5	1232	4 oz.	30 c.c.	1500	evaporating
6	1234	4 oz	30 c.c.	2500	depends
7	1228	6 oz	45 c.c.	2000	upon atmospheric
8					conditions
8:30		41	310	12500	Did not have to add as
	March 14/21				much tonight as during
12 M	1223	0	0	0	day.
1 P.M.	1230	3 oz	0	0	
2	1235	3 oz	0	2000 c.c.	
3	"	0	0	0	
4	1233	4	0	2000	

[ITEM(S) FOUND IN BOOK]

33T-150M-5-20

MEMORANDUM
THOMAS A. EDISON INDUSTRIES

MR. Archer

DATE 3-15-21

AVOID VERBAL MESSAGES
CONFIRM VERBAL UNDERSTANDINGS

FUNCTION

No 1 H_2SO_4 per liter 38.28 cc
$CuSO_4$ " " 339.51 grams

Reg. H_2SO_4 " " 35.74 cc
$CuSO_4$ " " 339.51 grams

Redford.

33T-150M-5-20

MEMORANDUM
THOMAS A. EDISON INDUSTRIES

MR. Archer

DATE Mar 16/21

AVOID VERBAL MESSAGES
CONFIRM VERBAL UNDERSTANDINGS

FUNCTION

No 1.

$CuSO_4$ per liter 334.53 grams
H_2SO_4 " " 31.44 cc

Redford

[ITEM(S) FOUND IN BOOK]

1-5-20

MEMORANDUM
THOMAS A. EDISON INDUSTRIES

DATE 3/17/21

AVOID VERBAL MESSAGES
CONFIRM VERBAL UNDERSTANDINGS

FUNCTION

H_2SO_4 37.40 cc per liter
$CuSO_4$ 335.10 grams per liter

Redford

[ITEM(S) FOUND IN BOOK]

33T-150M-5-20

M[redacted]
THOMAS A. EDISON INDUSTRIES

MR. Archer

DATE 3/18/21

AVOID VERBAL MESSAGES
CONFIRM VERBAL UNDERSTANDINGS

FUNCTION

$CuSO_4$ per liter 341.32 grams

H_2SO_4 per liter 30.82 cc

Redford

33T-150M-5-20

MEMORA[redacted]
THOMAS A. EDISON INDUSTRIES

MR. Archer

DATE 3/19/21

AVOID VERBAL MESSAGES
CONFIRM VERBAL UNDERSTANDINGS

FUNCTION

H_2SO_4 / liter 29.32 cc

$CuSO_4$ / liter ~~235~~ 11 grams
335

Redford

[ITEM(S) FOUND IN BOOK]

[redacted]

Anode chamber wt, 6 lbs
anode 8½ lbs.

Shot 29½ lbs with pitcher
pitcher empty 1 3/4 lbs.

29½
1 3/4
27½

5736
5882
11472
45888
28680
393835

[ITEM(S) FOUND IN BOOK]

38T-150M-5-20

MEMORANDUM
THOMAS A. EDISON INDUSTRIES

MR.

DATE 3/21/21

AVOID VERBAL MESSAGES
CONFIRM VERBAL UNDERSTANDINGS

FUNCTION

H_2SO_4 — 1 liter 29.48 cc.
$CuSO_4$ 1 liter 336.26

Redford

Mar 22.

$CuSO_4$ — 347.2 μmZ
H_2SO_4 — 29.6 μmZ.

38T-150M-5-20

MEMORANDUM
THOMAS A. EDISON INDUSTRIES

MR.

DATE 3/24/21

AVOID VERBAL MESSAGES
CONFIRM VERBAL UNDERSTANDINGS

FUNCTION

hot H_2SO_4 — 34.55 cc / liter
$CuSO_4$ — 235.11 grams / liter

Reg. H_2SO_4 — 28.84 cc per liter
$CuSO_4$ 279.26 grams / liter

Redford.

[ITEM(S) FOUND IN BOOK]

#6 Cu Bath 13 AM Potart Run to 600 Amp hours

One nickel washed well.
rinsed with distilled water
Close switch before putting in then
put in + put belt on as quick as
possible.

#6 Bath Copper plate,
Revolve 2 minutes in bath no current
Ran to 46 amp hours, taken out and
washed well.
Rinsed with distilled water
Close switch before putting in then put in
and put belt on as quick as possible
Ran to 604 amp. hours 46 hours
about 13 Amp hs hrs.

Remarks.
Rotator stuck and
did not go down
properly.

[ITEM(S) FOUND IN BOOK]

#8 tin Bath. 1 min Electric

2nd One clean it with Electric Cleaner — wash well — rinse distilled water + put in the bath. Exactly the same as No 1

8 Bath Copper plate.

Revolve 2 minute in bath no current

Raw to 84 amp/hours.

One minute Electric Cleaner, wash well — rinse distilled water.

Put in the bath with current on, and put belt on as soon as possible.

Raw to 747 amp/hours in 46 hours

about 16 amp per hour